Lectures ON AMENORRHŒA.

Delivered at University College Hospital,

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LECTURE I.—PART I.

AMENORRHŒA literally means absence of the monthly flow or of menstruation. I shall, however, use the term in a wider sense, and include in it, not only absence, but also deficiency, of the menstrual discharge.

But what is menstruation? It is a periodic discharge of a sanguineous fluid from the organs of generation of the human female, occurring every four weeks during the reproductive period of life, and lasting on each occasion from three to five days. All discharges of blood from the generative organs are not menstrual, for many diseases give rise to uterine hæmorrhage more or less profuse in character; nor, indeed, are all periodic or monthly hæmorrhages menstrual, for polypus and cancer, as well as some other affections of the uterus, may cause bleeding recurring every month long after menstruation has entirely ceased.

The source of the menstrual fluid is the whole of the genital tract from the orifice of the vagina to the infundibula of the Fallopian tubes; the greater portion of this surface, however, contributes mucus and epithelium only, while the blood, together with the other elements which give the flow its character, and without which it would not be considered menstrual, is supplied by the body of the uterus.

The flow has been regarded as a secretion and as a simple hæmorrhage. It is, however, a secretion only in so far as it contains mucus, and it is something more than a simple hæmorrhage. Indeed, the manner in which the characteristic part of the flow is formed is peculiar.

Immediately before menstruation is about to take place the inner surface of the body of the uterus is found to be soft, pulpy, and swollen. This is due to the presence of a membrane known as the decidua menstrualis lining the cavity. When impregnation takes place the decidua menstrualis becomes the decidua vera. The two deciduæ are, indeed, the same membrane in different stages of development. We will call the decidua menstrualis, as well as the thin layer of soft tissue usually found lining the body of the unimpregnated uterus (of which the decidua menstrualis is only a higher stage of development), the decidua simply; and, should we have to speak of the same structure during pregnancy, we shall apply to it the term in ordinary use, decidua vera.

The decidua, then, just before menstruation is pulpy in consistence. It is applied directly to the muscular wall of the uterus without the intervention of a layer of connective tissue, though there is an abrupt distinction between the two at their line of union. This distinction arises from the difference in the characters and arrangement of the elements entering into the formation of the two structures. The decidua is thickest at the fundus and the upper parts of the anterior and posterior walls of the uterus, where it measures a fourth of an inch, and sometimes more, in depth; it is thinnest along the borders of the organ, in the cornua, and just above the os internum. It is composed of a superficial layer of columnar epithelium, tubular glands lined by ciliated columnar epithelium, bloodvessels, nerves and lymphatics, embedded in a soft tissue, which again is formed of round and fusiform cells lying in a transparent structureless matrix. The glands do not terminate at the line of union of the decidua and muscularis, but penetrate deeply into the latter structure. The portions of gland found in the muscular wall, however, are lined not by columnar epithelium, but by round cells, and groups of such round cells may be traced in the meshes formed by the muscular-fibre cells for a considerable depth in the uterine wall. The soft tissue which forms so great a part of the decidua is not limited to that structure, for it also enters deeply into the muscularis, though it is found there in much less quantity than in the decidua, and in diminishing quantity as the distance from the inner surface is increased. The arrangement of the bloodvessels in the decidua is deserving of attention. The arteries run up along the borders of the uterus in the broad ligaments, and give off branches which ramify in the uterine wall. The branches from opposite borders anastomose and give off smaller branches to supply the muscularis and decidua. In the decidua the vessels ramify freely, and run more or less perpendicularly to the inner surface of the uterus.

The decidua is also called the mucous membrane of the uterus; but from what I have said you will perceive that the terms are not convertible, for all that thickness of the uterine wall in which glands are found, and therefore a considerable portion of the muscularis, must be regarded as mucosa; so that the decidua is really but a thin layer of the mucous membrane, while a considerable part of the muscular wall of the uterus must be regarded as muscularis mucosæ, just as the innermost layer of the muscular fibre-cells in the wall of the stomach into which glands penetrate is regarded as part of the gastric mucous membrane.

The decidua attains the highest development of which it is capable in the unimpregnated uterus just before a menstrual flow. At this time its elements, matrix, cells, walls of bloodvessels, &c., undergo fatty degeneration. The fatty change begins in the surface immediately within the os internum uteri, and extends upwards towards the fundus, and deeply towards the muscular wall. In consequence of this degeneration, and of the contraction of the uterine wall, the decidua becomes greatly congested, the walls of its bloodvessels yield and blood becomes effused into its superficial layer. After this has taken place, the whole of the membrane undergoes rapid disintegration and dissolution, and is ultimately carried away as débris in the menstrual fluid. By this process all the vessels of the decidua—both arteries and veins—are laid open, and hæmorrhage—the hæmorrhage of menstruation—follows.

While this process of destruction and death has been taking place in the decidua, another of growth and development has been going on in the layer of the muscular wall immediately subjacent. This is the commencement of the formation of a new deciduous membrane. The growth begins immediately within the inner orifice, and gradually extends upwards towards the fundus. The glands are formed from the groups of round cells in the meshes formed by the muscular bundles, the fusiform cells from the muscular-fibre cells, and the round cells from the connective-tissue cells. This process of evolution is continued throughout an intermenstrual interval, and the new decidua is not fully formed and completely differentiated from the muscular wall beneath until shortly before another menstrual flow is due. If impregnation take place, the new membrane forms the nidus of a fertilised ovum, and becomes further developed to play an important part in the nutrition and development of the fœtus; if, on the other hand, impregnation fails, degenerative changes similar to those described set in, and the decidua becomes removed like its predecessor.

You will infer from what I have told you that menstruation is not a separation of blood or of blood and mucus simply from the body by the uterus, but the molecular removal of a tissue which has become useless, inasmuch as impregnation has failed; and the hæmorrhage is the result of the destructive process by which the useless material is removed from the body. It is the terminal change of a cycle beginning with the development of a new decidua and ending with its destruction. It is not a process of activity, but of death. It may indeed be regarded in a certain sense as a process of purification or of cleansing, inasmuch as it is the removal of an effete product. Dr. Aveling has applied to this process the term "denidation," as it is the carrying away of a nidus prepared for the reception of an impregnated ovum; while the process of growth by which a decidua is formed during every intermenstrual interval is called "nidation."

Menstruation is not the result of congestion. It is true that the flow of blood in the uterine vessels gradually increases as the decidua is formed, just as it does after con-

ception, though in the former in a much less degree than in the latter. This gradually increasing vascularity is the condition necessary to the increasing activity of the part, and is not in any way allied to congestion. When menstruation is about to set in, and degeneration of the decidua and contraction of the uterine wall (which happen just before a monthly flow) have taken place, the muscular wall becomes pale, while the vessels of the decidua, the veins on the surface of the uterus immediately beneath the peritoneum, and the veins of the broad ligaments and of the ovaries become mechanically congested; the blood is driven out of the wall of the uterus into the superficial and adjacent veins.

Nor is menstruation the result of erection, as maintained by Rouget, for the following reasons. 1. Organs capable of erection are usually flaccid and lax; when erect, hard and firm. The uterus, on the contrary, is usually hard and firm, but during menstruation somewhat softer than usual. 2. In the most markedly erectile organs in the body erection does not give rise to hæmorrhage. 3. The sensations which accompany menstruation, even in their mildest form, are of a totally different character from those which attend on erection.

From what I have said, you will readily infer, and rightly, that the menstrual discharge consists of blood, the débris of the decidua, mucus, and epithelium from the uterus and vagina. All these elements can readily be detected in the fluid by careful examination from day to day from the commencement to the end of a flow. The menstrual fluid should contain neither clots nor shreds of membrane; whenever these are present I believe the condition to be pathological, though it may entail little or no suffering. The duration of the flow is usually from three to five, but it may be prolonged to seven or eight days. It is longer in the inhabitants of towns than in those who dwell in the country; in small, nervous, delicate women than in the strong and robust; in the sedentary and luxurious than in the active and abstemious.

It is difficult to estimate the exact amount of the discharge, but it is believed to average three or four ounces. It varies much in different women. What does this variation depend upon? Bearing in mind the changes which take place in the uterus and result in menstruation, and also the arrangement of the bloodvessels in the decidua, you will naturally conclude that it depends on the three following conditions:—1. The area of the bleeding surface, or the size of the uterus. 2. The depth of tissue destroyed, or the thickness of the decidua. 3. The tone of the muscular wall of the uterus.

Experience amply proves the truth of the first and last of these conditions: for women with large uteri usually menstruate abundantly; those with markedly small uteri, very scantily; those with flabby uteri abundantly; and those with unnaturally hard organs—such uteri being, moreover, usually smaller than normal—scantily.

With regard to the second condition, it is not easy to find evidence bearing directly upon it. In proof of it, however, I will relate three cases, two of which were observed by myself.

The first was a patient from whom Dr. Graily Hewitt removed a large ovarian tumour. She died on the day of operation, and the uterus was sent to me. The patient was forty-one years of age, married, sterile. The catamenia made their first appearance in her sixteenth year. They appeared regularly before and after marriage, and were not accompanied by pain. Each flow lasted four or five days, the amount discharged being always about the same. Fourteen years ago she had a severe flooding, lasting fifteen days. A similar flow, lasting nine days, occurred five years ago, after jumping over a wall. Two and a half years ago she noticed a swelling in the abdomen on the right side. This rapidly increased until August of this year (1876). With the exceptions mentioned, menstruation continued regular in time and quantity until August, 1875, when it was for the first time accompanied by great pain. From that date it recurred about every fifteen days, lasting the usual time, until she came under observation. The operation was performed seventeen days after the last catamenial flow. The uterus was elongated, measuring four inches in length. The body was lined by a decidua markedly thicker than that found in amenorrhœic women, but much thinner than that found usually in the uterus just before menstruation. The decidua was congested, and slight hæmorrhage had taken place into its superficial layer, but the flow had not yet begun. I have told you that the menstrual discharge in this case had been, with the two exceptions mentioned, normal in amount, though the bleeding surface was greatly increased in area. The appearance met with in the body of the uterus on the eve of menstruation accounts for this fact. The decidua spread over a larger surface than the normal, was much thinner than the fully-developed membrane, and the vessels opened by its disintegration were consequently smaller than those opened in the healthy uterus during menstruation. In this manner compensation was made for the increase in the area of the bleeding surface.

The second case I saw with Mr. Christopher Heath. The patient was twenty-nine years old, married, and had had three children and one miscarriage; the youngest child was two and a half years old. She began to menstruate in her fifteenth year, and was regular every four weeks, but she suffered pain with it from the first until marriage. After marriage menstruation became painless. She menstruated regularly between her pregnancies and during lactation, and had done so up to the time she came under observation. The last menstruation occurred Nov. 24th—30th. The flow appeared a few days before its time. She never had a flooding. The uterus was normal in size, but retroverted. Both ovaries were removed by Mr. Heath on Dec. 6th. On Dec. 8th—that is, fourteen days after the commencement, and eight eight days after the cessation, of the last flow—a discharge of blood took place from the genital organs. It was very scanty, and lasted two days only. This is exactly what we should have expected in such a case. The uterus was not enlarged; the bleeding surface was normal in area. The bleeding began the eighth day after the cessation of menstruation. At this time the uterus is lined by a thin decidua, measuring about the thirtieth of an inch in thickness. The removal of such a decidua would entail the opening of but very small bloodvessels, and consequently but slight hæmorrhage.

The third case that I shall relate to you in proof of the inference that the thickness of the decidua is a factor in regulating the amount of menstrual discharge is reported by Dr. Atlee in his work on Ovarian Tumours[1]:—"Both ovaries diseased and removed; menstruation regular both before and after the operation. April 17th, 1854, I operated on Mrs. J. C——, of Baltimore, in the presence of Drs. Monkur, Morris, Bull, all of Baltimore, and Drysdale, Cox, Jackson, and Fleming, of Philadelphia, removing both ovaries. She was thirty-five years old, had first menstruated at the age of twelve years, was married at the age of eighteen, and had six children, the youngest being four years old. After the birth of the last child the abdomen remained larger, and continued to increase until the 17th of March, 1853, when the enlargement suddenly disappeared, followed by great soreness of the abdomen. No doubt the cyst had ruptured and produced peritonitis. Eight weeks after the swelling began to return, and continued increasing until she presented herself to me. She nursed all her children, and while nursing she menstruated regularly, commencing at the expiration of five months after parturition. She continued to be very regular after the birth of her last child, and up to the period of the operation. The last period occurred on March 20th preceding. After the operation the same evening the menses appeared, and continued the usual number of days. For several years Mrs. C—— wrote to me on every anniversary of the day of the operation, always assuring me that menstruation was perfectly regular. Being on a visit to Baltimore in December, 1866, I saw her, and she informed me that she had menstruated as regularly as ever up to May, 1864, when the menses ceased for one year, and again returned in May, 1865, for the last time."

This case is of the greatest interest and importance, not only as it affects the question I am now discussing, but also in its bearing on the theory of menstruation. At present I wish to call your attention to the menstruation which occurred immediately after the removal of the ovaries. The operation was performed on April 17th, twenty-eight days from March 20th, the date of the last catamenial flow, on the day, in fact, when the menses were due. On the evening of that day the discharge appeared, and it continued

[1] Ovarian Tumours, p. 35. Philadelphia, 1873.

for the usual number of days. In this case the decidua had attained its full development, and consequently the flow was natural; in Mr. Heath's case the decidua was extremely thin, and the hæmorrhage was very scanty; in Dr. Hewitt's case the uterus was enlarged, but the decidua was thin, and the discharge remained normal in amount. These three cases appear to establish the fact that, *cæteris paribus*, the hæmorrhage of menstruation is in proportion to the development of the decidua.

The first of the three conditions mentioned—that is, the area of the bleeding surface—leads us to a question of great clinical importance: What is the size of the fully developed unimpregnated uterus? There are two means by which we can, during life, determine more or less accurately the size of the uterus: the introduction of the sound and the bimanual method of examination. The sound will, in most cases, give accurate information with regard to the length of the uterine canal, an item of the greatest value in determining the size of the organ. The length of the canal in a well-formed uterus is two inches and a half. But the canal may be of proper length, and the uterus be still imperfectly grown, for in the well-formed organ the walls possess a certain thickness. In measuring this the sound does not help us, and we must have recourse to the bimanual method of examination; this alone can give us information even approximately true upon this point. Let me say in passing that you should regard no gynæcological examination as complete, whatever method you may have adopted, and whatever instruments you may have used, if you have neglected to examine bimanually. There are several conditions of the pelvic organs which can be recognised by this method only, and on your skill in conducting this kind of examination will, in great part, depend the accuracy of your diagnosis, the truth of your prognosis, and the success of your treatment.

A well-developed uterus measures in the body one inch in antero-posterior direction, and one inch and three-quarters in width between the Fallopian tubes. Considerable practice is required in order to be able to determine the volume of the uterus, inasmuch as accuracy in it depends upon a cultivated sense of touch. There are no other means by which it can be accomplished, and I would advise you to cultivate this sense by examinations on the cadaver, for then you will be able to compare inferences drawn from sensations with actual measurements, and in this way acquire a sort of "standard of sensation."

The shape and size of the cervix, especially of the infra-vaginal portion, are of importance, and this part can usually be measured without difficulty. Normally, it is in the form of a flattened cone, projects about one-third of an inch into the vagina, and measures about one inch at the base transversely, two-thirds of an inch at the base and half an inch at the apex in the antero-posterior diameter. The uterus is somewhat larger just before a menstrual epoch than at other times. This enlargement is due to the presence of the decidua, and to the increased quantity of blood in the uterine vessels. In some cases the enlargement is easily recognised, and it may be said with much probability that menstruation will soon take place, while in others the enlargement can scarcely be detected. The uterus has a certain consistence also, a knowledge of which can only be obtained in the living subject; but it is necessary you should be thoroughly well acquainted with it.

From what I have told you, the presence of the uterus in a healthy and well-developed state is evidently necessary to menstruation. I shall tell you again that discharges of blood may take place from the organs of generation when the body of the uterus has been entirely removed and only a small portion of the cervix left. Such sanguineous flows, though they may occur periodically, cannot be regarded as menstrual.

It has been generally believed that menstruation was the result of an ovarian influence, and that this influence emanated from the maturation and rupture of a Graafian follicle; and, in accordance with this view, it was long maintained that a Graafian vesicle ruptured with every menstrual epoch. It cannot be doubted that an ovum is discharged, in the great majority of cases, in connexion with menstruation; at the same time it must be stated that a considerable number of cases have been recorded in which menstruation had taken place unaccompanied by maturation and rupture of an ovarian vesicle, and these cases are sufficient to show that menstruation is independent of the discharge of ova.

But is the presence of the ovaries necessary to the performance of the catamenial function? It was, and is still, generally maintained that in the absence of the ovaries menstruation is impossible. The evidence on which this view rests is, that in certain cases where the ovaries were diseased menstruation has been known to be absent; and in certain other cases where the ovaries had been removed, the patients, who before the operation had menstruated regularly, never menstruated afterwards.

With regard to the first statement, that menstruation is absent when both ovaries are diseased, it may be said that menstruation is also absent in many cases of disease of the lungs, kidneys, or liver, and that the amenorrhœa accompanying disease of the ovaries bears the same relation to the ovarian affection as that accompanying disease of the lungs, kidneys, or liver does to the pulmonary, renal, or hepatic mischief respectively; and that, in so far as this evidence goes, the ovaries are no more necessary to the performance of the menstrual function than the lungs, kidneys, or liver—that is, that they play no direct causative agency in the production of the catamenia.

Concerning the absence of the ovaries, no case was known until recently in which menstruation, or rather a monthly discharge of blood, had taken place from the generative organs after both ovaries had been removed. Since ovariotomy has become an operation of frequent occurrence, however, several such cases have been recorded. One such case I have already quoted to you from Dr. Atlee's work on Ovarian Tumours, and a brief examination of this case will suffice to place before you the evidence for the view that the ovaries play no part in menstruation. In the case recorded by Dr. Atlee, a discharge of blood took place from the vagina every month for several years after both ovaries were removed, lasting on each occasion the same number of days that menstruation did before the operation. In this case, the periodicity of the discharge, its duration, and the complete cessation of it at the age of forty-five, are strong evidence in favour of its being menstrual. This evidence, strong as it seems, is not quite enough to prove the catamenial character of the flow, for periodic hæmorrhages from the uterus other than menstrual are not very uncommon. To decide the question finally, a microscopic examination of the discharge and a post-mortem examination of the pelvic organs are necessary. Microscopic examination of the fluid would detect, if present, the débris of the decidua, and show that it is not a simple hæmorrhage due to congestion or some other cause unknown to us. Post-mortem examination of a subject who had died during the flow would be still more satisfactory. Such investigation is absolutely necessary to decide finally the nature and source of the discharge, because a periodic sanguineous flow has been known to take place from the vagina after both ovaries and the uterus, with the exception of a small portion of the cervix, had been removed. One other point should be determined by post-mortem evidence, and that is—were the whole of the ovaries removed in the cases where periodical hæmorrhages had taken place after the operation? This is necessary, because the ovary is in some cases of ovarian tumour greatly elongated, a part of it being involved in the tumour and a part in the pedicle; while in other cases detached portions of ovarian tissue may exist in the broad ligament. In such cases a portion of the ovary may be, and indeed has been, left behind, so that, though double ovariotomy had been performed, yet ovarian tissue was still present in the pelvis. Until these points, upon which we have now but little evidence, are made clear, no positive statement can be made about the part played by the ovaries in menstruation.

Before proceeding further we must determine the age at which menstruation first appears. The uterus and ovaries are small and imperfectly developed during infancy and childhood; they are functionally in abeyance, and menstruation does not take place. Its first appearance is usually observed between the twelfth and fifteenth years. It may, however, appear earlier—even as early as the ninth or tenth, or it may be delayed until the twentieth or even thirtieth year. It appears earlier in warm than in cold climates, in the inhabitants of towns than in those of the country, and in certain races than in others. The exact time of its advent in any given instance depends on the state of the general health, the development of the system

generally, and especially of the degree of development of the organs of generation. The function is performed monthly or in a uterine period, except during pregnancy and lactation, until the age of forty-five or fifty. In some cases it ceases earlier; it may cease even as early as the twentieth year; it may, on the other hand, be regularly performed up to a late period of life. Cases of menstruation occurring at a very advanced age are open to serious doubts, inasmuch as disease occasionally gives rise to periodic bleeding, which may easily be mistaken for menstruation.

CASE OF UNUNITED AND ADHERENT TENDO ACHILLIS,

SUCCESSFULLY TREATED BY PARING THE ENDS AND STITCHING THEM TOGETHER WITH CATGUT SUTURES.

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THE treatment of cases of ununited tendo Achillis, the result of an external wound, has hitherto been considered very unsatisfactory, more particularly when the divided ends have become much retracted and adherent to the skin and surrounding textures. The retracted ends of the tendon in such accidents have occasionally been brought together and secured by silver-wire or other sutures; but the inflammation and suppuration which usually follow this proceeding have, in the majority of cases, rendered the operation a failure. Now, however, that we have, in the antiseptic treatment and catgut suture, sure means of making the necessary wound and securing the divided parts without risk of suppuration, I am encouraged to hope that the condition of ununited tendons will, in the future, prove more amenable and satisfactory in regard to its treatment. In confirmation of this hope I report the following case, which thoroughly proves the success of the antiseptic treatment in a very aggravated example of the accident under consideration. From the condition of the divided ends of the tendon and surrounding tissues, as accurately ascertained during the operation, I am of opinion that nothing short of the treatment adopted, or of some similar interference, would have restored the tendon to its proper state and usefulness.

J. P——, aged thirty-seven, a strong healthy sailor, was admitted into my wards in the Royal Infirmary on the 10th March, 1877. Rather more than two months before admission the patient accidentally struck the back of his left leg with an axe and inflicted a wound which cut across the tendo Achillis a little above the ankle. After the injury the leg was kept in the straight position until the wound healed; but when the patient commenced to move about he found that he had little or no control over the foot. Finding that he was not improving, and being quite unfit to follow his employment, he applied for advice to Dr. Wilson of Greenock, who sent him here to be under my care.

An examination of his condition showed a cicatrix across the lower end of the tendo Achillis, which had been completely divided. There was a distinct interval of fully one inch and a half between the divided ends, and there was not the slightest attempt at any union between them. The upper end was adherent to the skin, and when the muscles of the calf were put into action the tendon only drew upon the skin and surrounding tissues, and had no direct influence upon the heel. In consequence of this condition the patient's foot was useless, and he was quite unable to follow his employment.

On the 13th of March I performed the following operation, with the hope of relieving his unfortunate state. The leg, as far as the knee, was rendered bloodless according to Esmarch's plan, and then an incision about three inches long was made on the inner margin of the tendon, so as to expose its ends where divided. A little careful dissection thoroughly disclosed the affected parts, when it was found that the tendon had been completely divided about one inch and three-quarters from its insertion into the os calcis. The divided ends were retracted for about an inch and a half, and between them was a thin-walled cyst or sac containing a little fluid serum tinged with blood. There was no trace of any new organised material forming a bond of union between the divided ends, but the lower end was rounded off in the most perfect manner. The upper end was somewhat enlarged and jagged in appearance, and was adherent to the skin and cicatrix of the external wound. Having first freed the upper end from its attachment to the skin and cicatrix, I pared both ends of the tendon, removing a thicker slice from the lower than from the upper one, on account of the rounding off of the former. Then, by flexing the leg to almost a right angle, the ends were brought in contact and secured by means of two prepared catgut sutures of double "medium" thickness. The limb was then firmly adjusted in this flexed position by applying the apparatus usually employed in the treatment of ruptured tendo Achillis. The operation was performed under the antiseptic spray, and the wound was dressed in the usual way. The antiseptic dressing was continued, and changed as often as required, until April 1st, when, the wound being quite superficial, boracic lotion was substituted for it. Three weeks after the operation the parts were carefully examined, and, as good union had taken place between the ends of the tendon, the limb was slightly straightened, so as gradually to stretch the new material and obtain the proper lengthening of the tendon. This treatment was carefully continued, and on April 22nd it was found that the result of the operation was perfect. The patient had entire control over the foot, the union of the tendon was strong and complete, and the heel could be brought to the ground without any difficulty.

Edinburgh.

NOTES ON SYPHILITIC PHTHISIS.

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SCOTS FUSILIER GUARDS.

THE subject of syphilis, its etiology and relation to certain conditions of the viscera and inner structures of the body, has of late been brought conspicuously before the profession. On two occasions it was discussed fully—perhaps it might be said exhaustively—by the Pathological Society. While forcible and ingenious hypotheses were advanced, it is to be feared that, as regards the establishment of unanimity of opinion with reference to the nature of primary disease and its effects on the system, as well as practical results in improved treatment, the subject remains much in the same position as it was antecedently.

The more recent of the two meetings was devoted to the consideration of visceral syphilis, a subject of especial interest and importance to military members of the profession. I was struck, as doubtless were many then present, with the paucity of specimens (as well as with their somewhat unsatisfactory character) illustrative of the existence of what may be well designated a very obscure affection—syphilitic deposit in the lung. Any remarks I had to offer pertained rather to the clinical than pathological bearings of the subject, and it would have been somewhat out of place in me to obtrude them on a Society of the latter character.

For some time past I have been engaged in tabulating all cases of phthisis admitted into the hospital of this regiment with special reference to syphilis. As yet I do not feel justified in drawing any positive conclusions on a subject so admittedly difficult to determine as the relation in cause to effect of venereal and lung disease, and it is with diffidence rather than dogmatism that I venture to notice one or two features in the diagnosis of the affection which heads this paper as the results of observation thus far.

A difficulty that presents itself at the outset of any inquiry of the kind is the fact that, with few exceptions, chiefly those of young men who break down from tuberculosis soon after enlistment, soldiers affected with phthisis at some time or other previously contract syphilis. Proceeding further, we find that at the time of the infection men may be divided

into two classes—one, in which the ailment is of comparatively an unimportant character, gives little or no outward evidence of constitutional engagement, and is not of a character to arouse any dormant chest proclivities; the other where, *au contraire*, such conditions obtain to a marked degree. Again—and this point I must particularly dwell upon, for on it is founded a principle to which I attach marked importance—the latter severe form of enthetic disease may or may not be treated at all, or, if so, inefficiently, with mercury. The two kinds of malady might, perhaps, for illustration, be considered as somewhat analogous to varicella and severe variola respectively, as regards the degree in which the system is implicated. An experience of some thirty years in military hospitals has established in my mind the belief that if a man affected by syphilis in those forms which, so to speak, permeate through and poison the system, be at the outset carefully treated with mercury, the constitution may, and in many instances does, throw off the disease, and after a certain time, not necessarily remote, leave the system free from specific taint. A lessened capacity, for a greater or less period, to resist the invasion of other complaints, particularly those of an hereditary character, I would fully concede, as well as that fortuitous circumstances, favourable or adverse, materially influence such results.

If I did not misapprehend his remarks at the Pathological Society, Sir William Gull appeared to consider syphilis as generally speaking an ineradicable disease, and also one calculated to manifest in *all* cases an adverse influence on the duration of life. With much deference to a physician of so great experience, I would hesitate to accept the first of these views; and, with regard to the second, place this disease in the same category with alcoholism, gout, and so-called blood diseases, as a *possible* factor among others in the degeneration of tissue common to the decline of years.

In its bearing on the subject of these remarks, I feel myself compelled to glance at one aspect of the recent debates.

At the first discussion on syphilis by the Pathological Society, the opinion was advanced that such disease might be classed with exanthematous and certain other fevers. Admitting certain features in common, I think we may reasonably consider that while diseases of the latter order leave particular sequelæ and proclivities to other affections behind, they yet differ essentially from syphilis in not generating any specific uniform deposit, such as we meet with in gummata, and perhaps some antecedent visceral lesions. In the one case we have left an impaired state of the system, for the most part transient, possibly determining to some pre-existent weak spot or particular organ of the body; in the other, we may have a change *sui generis*, not, as in the previous instance, ordinarily limited as to time in operation, but a condition not confined to the blood—one that extends to offspring—that, in a word, with the present state of our knowledge cannot be precisely conceived and defined.

These are days I am well aware when it behoves us to be cautious when speaking of any remedy as a specific. Mercury, perhaps more than other therapeutic agents, has lost repute as a drug of such property. Yet if there be one disease in which its potency appears to my mind indisputable, and in which a fair claim to specific action may be advanced, I believe it to be syphilis. At the same time it must be borne in mind that idiosyncrasies—certain states of constitution antagonistic to the operation of the antidote—are met with occasionally.

The position of a patient in military and that of one in civil life are widely different (I allude of course to the private soldier). In the one case he is amenable to discipline, diet, and every salutary restraint calculated to further recovery; in the other, from causes needless to specify, such wholesome procedure does not as a rule obtain. The consequences of this favourable state in the military service,[1] I believe to be as follows:—(1) That in a large proportion of cases the virus is eradicated from the system, and the patient is left in the condition pre-existent as regards constitution; (2) as a corollary to the foregoing, that the offspring of such men are freed from syphilitic taint.

These views are founded on close observation of soldiers from the beginning to end of their period of service—viz., twenty-one years.[2]

An ordinary case is the following:—A young man, within a year or two after joining the regiment, contracts syphilis. Promoted from the ranks or otherwise, after a varying interval, the soldier marries, either with or without leave. He, his wife, and children, then come under notice for a lengthened time. A certain proportion of the latter are inmates of the Guards Industrial Home, where they remain under the care of the senior medical officers of their respective corps, until situations are procured as domestic servants. In point of health they will bear favourable comparison with the inmates of other kindred institutions.

I have already glanced at some of the difficulties that beset an investigation of syphilitic lung affections. Given a case of incipient phthisis, where there are no external indications of venereal disease, are there any symptoms, auscultatory or otherwise, from which physicians may diagnose syphilitic lungs, either in the form of fibroid or gummatous deposit? It may be said the history throws light on the subject. True, to a certain extent, but is there no danger of a medical man falling into the *post hoc propter hoc* mode of reasoning, and thereby giving undue prominence to antecedent history, wittingly or unwittingly, in the formation of a diagnosis?

The field for research, it may well be admitted, is greater in military than in civil hospitals, and it is to Netley that I have looked—must still look—for increased light, clinical and pathological, on every form of visceral syphilis. In the latter aspect, histology, as shown at the recent discussions, is still somewhat at fault, and this circumstance accounts for the divergency of view so well expressed by Dr. Wilson Fox as to what really constitutes syphilitic lung.

An ingenious hypothesis was advanced by Mr. Berkeley Hill, and, if I am not mistaken, supported by Mr. Hutchinson, that deposits within the body may take place when the secondary eruption is either wanting or ill-developed. This view, I apprehend, rests a good deal on the acceptation of syphilis as an exanthem, and that a determination to inward organs takes place. I cannot but think that in such contingency the system, as in examples of suppressed measles or scarlatina, would be much more seriously implicated, and engagement of organs, like the lungs, be brought to light by unequivocal symptoms. Occasionally, indeed, we witness pyrexia, accompanied by hurried respiration, pain in the chest, and a condition generally not unlike the commencement of pleurisy. Yet I have never been able to detect any pulmonary ailment at the time, and the untoward symptoms usually disappear quickly and coincidently with an outbreak of eruption. So, with a certain degree of parallelism between syphilis and the exanthemata, are we justified in saying that experience affords confirmation as regards the viscera most open to investigation, and, perhaps it might be added, most likely to be affected? I would rather refer the commencement of syphilitic phthisis, in common with kindred deposits in other organs, to a *later* period, when the blood has become vitiated, the constitution lowered, and a condition generally favourable to the deposition of adventitious products, set up.

Formerly the class of pulmonary disease associated with venereal by military surgeons, and, in fact, pretty generally viewed by them as true syphilitic consumption, had reference to a state in which lung affection was preceded by aphonia and indications of ulceration of the larynx. Undoubtedly the form of phthisis now termed "laryngeal" is often closely connected with enthetic disorders. In my own experience this kind of chest affection has been infrequent of late years; why, I am scarcely yet prepared to say. Defective hygiene formerly may have had some bearing on the matter as regards the army, while neglect, exposure out of doors, and irregularities of various kinds, may not improbably lead to a greater prevalence now of this malady among the lower orders in civil life.

The difficulty in establishing a reliable differential diagnosis between ordinary consumption and syphilitic affection of the lung appears to me, on various grounds, great—almost insuperable. As regards the army, soldiers of middle age, with marked enthetic history, are admitted to hospital with symptoms, general and auscultatory, which differ in

[1] Throughout these remarks I refer particularly to my own corps, as the Guards are differently circumstanced as regards residency to the rest of the army.

[2] This advantage is unfortunately likely to be curtailed very much by the great reduction which now obtains in the time of active duty in the ranks.

no respect from those of younger men who, sufferers from phthisis, have yet, from brevity of service (?), escaped venereal taint. Subsequently, an autopsy reveals in either case a similar condition of disease—viz., ordinary destruction of pulmonary tissue by tubercle. The inference I draw from this and other circumstances is that syphilitic phthisis, presuming it to exist, is for the most part a *curable* disease. My own experience thus far is confirmatory of this view.

Two distinct forms of lung affection which I am disposed to consider as syphilitic have come under my observation. In the first and less frequent, the greater part of the organ is engaged, and the disease appears primarily at the base; thence it extends to the whole lung posteriorly, as well as, anteriorly, to the apex. The other and more common class is that in which the complaint is limited to one or both apices. In either case the individual has passed through the stage of secondary syphilis, and the constitution is left free from outward evidence of such disease.

As regards the former condition I admit there is little if any difference to be observed between it and ordinary chronic pneumonia. It has seemed to me that the lung is more extensively involved than in the latter affection, and that premonitory symptoms, local and general, are less apparent. There is little if any pyrexia, but slight rise in temperature, dyspnœa only on exertion, and no sputa. The organ is found to be in a state of consolidation more or less extensive, and remains so for a long, indefinite period. Ultimately recovery takes place.

In the second and more frequent form of disease the individual presents himself with symptoms which at the first glance appear to be those of ordinary chronic tuberculosis in the first stage, affecting one or both apices. Closer investigation, however, will detect some points of divergence. These are:—

1. The physique. The ordinary characteristics of a phthisical subject are wanting. The chest is well developed, and body fairly nourished.

2. The absence of constitutional irritation of a severe character. The thermometer rises but little above the normal standard. There is freedom from night perspiration, diarrhœa, and irritating cough.

3. The dulness on percussion is less pronounced, and less definable in extent. It more frequently affects both apices, and simultaneously.

4. The characteristics of tubercular sputa in the earliest stage are wanting. The patient is pallid, complexion waxy, and his appearance generally indicative of cachexia. More frequently than otherwise he is sent to hospital by a non-commissioned officer of the company who has observed the man to be out of health. Were it not for such notice the latter might consider himself well enough to remain at duty. His symptoms are elicited rather by close questioning than voluntary statement. On auscultation, loud, harsh inspiration, with expiratory murmur of the same character, are detected, or else tubular breathing if the case be more advanced. Vocal resonance, more or less distinct, is always present. The pulse is frequent, but not so rapid, perhaps, as in ordinary phthisis. There may be no sputa, or else a little frothy mucus is hawked up from the throat rather than expectorated.

Amendment shows itself in a gradual restoration of the breath-sounds to a normal condition, the constitution recovering tone and vigour. As regards the greater prevalence or otherwise of hæmoptysis I am not yet in a position to offer a decided opinion.

The chronicity—stationary condition—of both forms of syphilitic lung disease, together with the absence of prominent and distressing constitutional symptoms, are noticeable features which tend to aid the diagnosis.

Any reliable grounds for predicating the existence of small gummatous masses in the lung I must confess my inability to recognise. A haphazard guess, founded on the presence of external deposits of the kind coincidently with an impaired function of the respiratory organs, dry cough, dyspnœa, &c., might be made as regards their early formation.

The treatment which I have found most efficacious has been a combination of cod-liver oil with iron in various forms, particularly the iodide, iodide of potassium, mild counter-irritation by iodine, wine, and a liberal diet. I have not considered myself justified in administering mercury, any good effects from the drug having been previously obtained. Change of air appears to exercise a favourable influence, and a sea voyage I should consider especially indicated and likely to prove beneficial.

I have met with one case where phagedæna of the penis was followed by gangrene of the apex of the lung, and a fatal issue occurred.

It may be asked how far the foregoing views have been borne out by the experience of the post mortem room. I am free to admit that any corroboration thus afforded partakes far more of the negative than positive character. I have already touched on the infrequency of syphilitic deposits in the lungs, as revealed in fatal cases of chest disease occurring in this regiment. I can scarcely say that I have met with a satisfactory, undoubted case of the kind. Examples of gummata at the base of the brain and in the liver, together with, occasionally, patches on the heart of a pseudo-syphilitic character, comprise my experience on the subject. Instances of such deposit in the scrotum and external parts of the body have come under my notice at long intervals.

Claverton-terrace, St. George's-road, S.W.

THE ANHYDROUS DRESSING OF WOUNDS.

BY ROBERT HAMILTON, F.R.C.S.,
SURGEON TO THE ROYAL SOUTHERN HOSPITAL, LIVERPOOL.

(*Concluded from page 605.*)

AMONG the facts which may be pointed out as to the effect of water on wounds the following may be mentioned. In scalp wounds of no great size, where a piece of dry lint has been placed on the wound in the first instance without any attempt to bring its edges into close apposition, and the lint has been left for several days undisturbed, there is not on its removal the slightest appearance of pus having been formed, though the wound presents a raw red surface, apparently due to the tearing off of the lint, for this latter had as much of its under-surface as covered the actual wound pale and moist, whilst immediately outside of this the blood, which at the first dressing was oozing, had dried round the margin of the wound, and formed with the lint an impenetrable barrier, which entirely sheltered the wound from all external influences of any sort. Other observers have studied this same fact, and have been struck with the evidences of design—of means adapted to an end, which are here displayed.

If this wound be now washed and cleansed to remove the dried blood around its margin, and dressed with dry lint, it will be found that in two days its surface is bathed with pus. How has this been formed? Not by the entrance of a bacteria germ, but by the action of the water with which it was washed; some of the water remaining, an interchange of action takes place between the atoms of water and the constituents of the young cell-growth, so the latter are prevented developing into perfected tissue, and are broken up; the mutual interchange has resulted in the formation of those lower organisms which *en masse* we call pus, whose future is further departure from tissue-growth,—being in the direction of progressive degenerative changes, under atmospheric influences, ultimately leading to the production of bacteria, monads, and that fitful germ-life whose vitality is but of short duration, into which healthy cell-growth, whether animal or vegetable, always degenerates when interfered with by external agencies.

If, instead of dry lint, the second and subsequent dressings be lint soaked with water, of course the same effect as the above is produced, only a still larger development of pus ensues, because the more particles of water brought in contact with the wound, the greater the number of tissue elements deviated from their course and decomposed into pus-cells. If, on the other hand, the dressing be carbolic oil, then, though we have not as evidence of its degenerative action on the tissue elements the formation of pus to so great an extent as in water-dressing or the further breaking up of this pus into the first forms of life, the carbolic acid seeming to be a complete preventive of the latter; yet some pus is formed, and therefore this particular

form of dressing cannot be said to be altogether a non-interferent with tissue development.

It is scarcely needful here to speak of the many other dressings had recourse to, because the above two—water and oil—may be said to be respectively typical in their action of all lotions and ointments. But there is a third plan of dressing wounds, whose *modus operandi* is different. When collodion or Friar's balsam is applied as the first dressing of a moderate-sized wound, and when a dry powder—for instance, oxide of zinc and starch—is dusted over the surface of a more extensive lesion, such as a burn, the object is to seal the wound from external influences; and these substances, not having any particular antiseptic properties, yet do, by the way in which they entirely remove all moisture from the part and seal it from atmospheric action, practically assist the tissue to proceed uninterruptedly in throwing out and organising new growth. The secret of their success lies in two properties—their power of reducing the temperature and of absorbing all moisture, the first being the characteristic of collodion as of all others, the second the distinguishing feature of the balsams and the powders.

It is a curious thing to find an old French surgeon—M. Dionis, Chief Chirurgeon to the Duchess of Burgundy,—in his course of demonstrations in the Royal Garden at Paris more than 150 years ago, setting forth as the best dressing for a wound certain things which really form the essentials of both Lister's plan and of that which comes nearest to it in success—the dressing with Friar's balsam. He says, at p. 42:—"After performance of the suture, there are yet some essential circumstances to be observed. ..... Several authors advise to the wound a powder composed of glutinous and viscous ingredients, such as mastick, myrrh, bolus, and aloes; others assert the best remedy to be the nutritive juice which, repairing to the part, procures the reunion. Arcæus's balsam is commonly used, and with it a small pledget is charged and clap'd on the suture, and afterwards covered with the great pledget. Next is laid on the plaster, which ought to be composed of viscous and astringent ingredients; then the bolster, moistened in some liquor which fortifies and resists putrefaction."

Here we have set forth, in quaint language, a succession of dressings particularised as necessary to be applied over a wound after sutures have been inserted, which cannot be dissimilar in their *modus operandi* to the lint soaked in carbolic oil, the antiseptic gauze, the protective, and the bandage which Lister has now made famous. Whilst the benzoin, the storax, the myrrh, and the aloes, all contained in Friar's balsam which is the favourite dressing of many a leading surgeon of the present day, find their prototypes in the mastick, the bolus, the aloes and myrrh, which M. Dionis and the surgeons of his day used for the purpose of "fortifying and resisting putrefaction."

The dressing of wounds without the use of water has at various times been advocated. Dr. Hewson, of Philadelphia, at the late International Congress held in that city, advocated dryness as an essential element in the treatment of wounds; he never allows water to be used upon them. But it does not yet seem to be understood how water acts injuriously upon them. We can only say that it evidently plays a more important part than that of a passive medium for other agencies to work in. The very apparent simplicity of water was a recommendation in the minds of many for adopting it as a dressing for wounds; the argument being that it would not interfere with nature's own process. Water-dressing was for years advocated as the simplest, safest, and surest dressing because of its cleanliness, innocuousness, and therefore non-interference with what should be a perfectly normal process. Probably it would have continued to have had a very large amount of support had there not been added to it the covering of oil-silk, with the object of retaining the moisture, an apparent advantage at first sight, because only one half of its effects were understood, but now recognised to be in this form a far more powerful agent in effecting abnormal changes than in promoting normal processes; the retention of heat as well as moisture leading to rapid combustion and disintegration of much formative material and thus lengthening out the time required for completing the healing process. This at least is now understood to be a serious drawback to the use of water-dressing.

It seems to me that both Tyndall and Burdon-Sanderson fully recognise the presence of water or moisture to be as necessary a factor as the germ in originating putrefactive changes.

Let us now consider the processes which follow internal contusions and external lacerations, as there is an essential difference between the two.

Lesions under cover of the skin, such as bruises, contusions leading to ecchymoses, simple fractures, all get repaired, and the *status ante hoc* restored, merely by a steady continuance, in the parts immediately surrounding the bruised tissues, of all the processes which went on in them before the injury. They may, by a sort of accelerated vitality—which, after all, is only an exaggeration of the normal activity,—hasten to replace the old by a more rapid formation of new material, and to remove the destroyed tissue by the same media as the natural waste tissue has always been removed by. We talk of absorption: there is no more absorption, if we mean by that a new process set up, than before. The same media which have always carried off used-up tissue, take away that which has been violently separated. It has only to undergo a series of changes to bring it into the same condition as all desquamated tissue is prior to its entrance into the venules and capillaries which carry it into the general current of the circulation.

But if we now try to picture what takes place, after a portion of skin has been removed with considerable bruising of the parts beneath, we must admit that a different order of things goes on. Agencies from without of various kinds now come into play, one or other of which it is impossible to exclude. If it is not the atmosphere or its contents, it will be antiseptic lac, or carbolic oil on lint, or poultice, or balsam, or water-dressing. But one and all of these have no affinity with tissue growth. They are positive obstructives to its steady development. Their constituents coming into contact with living movements must put a stop to them; and suspension means death to germinal matter, and death means a severance from the yet living, and a breaking up of the once living cell into the dead pus-corpuscle; and this is just what we see in every large surface-lesion. When dressing a burn of any depth, we may surround it with an atmosphere of carbolic acid, and carefully cover it with carbolic lac and gauze, yet we cannot prevent pus from being formed. We have substituted for the natural covering—the living skin—a foreign, an alien, a dead structure, and no living intercommunication takes place between the two. Contact with such substances destroys the vitality of every cell on which they impinge. In this particular class of cases, therefore, Lister's method fails as fully as any other, and of necessity, for when the living and the non-living are brought into contact, the former cannot vitalise the latter, but the latter devitalises so much of the former as comes into apposition with it. How different is it in the case of a compound fracture, or of an amputation, where you bring living surfaces into contact, and have only to take care that nothing intervenes. It is in the perfection of the means which Lister has invented to carry out this latter precaution that the success of his method lies. By keeping two living surfaces in accurate apposition, and by allowing no alien matter to collect between or interpose, rapid union takes place. But let it be the smallest ulcer, or the largest burn (of course I speak of an ulcer which has no constitutional taint), and in either case we are just as much at sea as to the best method of assisting nature as ever we were, except in one important particular, and it is this. A deeper insight into nature's way of healing breaches of continuity has led us to banish, one after another, many of the usual appliances formerly had resort to, because they are seen rather to interfere than to aid the process.

A few weeks ago, having met with great success in the use of the compound tincture of benzoin, as others have done, in the dressing of cuts and wounds of moderate size, I tried it in larger destructions of the skin. In four cases of burns of the hands and arms, and in two of large lacerated wounds of the arm and elbow, where considerable portions of skin had sloughed, the following treatment was adopted. One part of Friar's balsam to four of methylated spirits was put in the spray-producer, and the wound was sprayed with this during the time of dressing, the dressing consisting of a piece of lint saturated with carbolic oil, outside of this a little oakum and a light bandage. For the first few days I was pleased with the effect. A healthier appearance of the wound, a diminution of pus, clean edges,

and no pain, seemed to show that nothing was interfering with the growth of the new tissue. But, after a time, I had to confess that this growth was making slow progress and that there was not in this mode of dressing any advantage as far as rapidity of healing was concerned.

As this method, with some modifications, is still under trial, I forbear saying more at present, except that its use in the dressing of compound fractures does away with the carbolic spray, and thus removes the difficulty which I have pointed out in connexion with the use of water. The next plan which I tried for the purpose of obviating the same difficulty was the dusting with a dry powder the large raw surfaces left by the destruction of skin from a burn. After the carron oil had been applied for the first four days, a powder composed of starch and oxide of zinc was dusted on the surface. Over this some carbolic gauze was lightly fastened, and the dusting was repeated night and morning. No washing or cleaning of the surface, beyond a removal of such of the scabs as appeared loose, was permitted. The result of this form of dressing has been very satisfactory, and is a decided advance in the treatment of burns and scalds.

Here, then, are two methods of avoiding the use of water in the dressing of wounds, both of which I have found lead to better results than when water, either by washing the surface or applying it as a dressing, has been used. It must not, however, be understood that I advocate the leaving of wounds uncleansed from dried loose scabs or decomposing pus. On the contrary, the skin round a wound should be kept scrupulously clean. There are other methods of carrying out the anhydrous dressing of wounds, such as the use in the first instance of collodion to close the wound, or of clotted blood, with dry lint superimposed, or of picked oakum or tenax. Under any of these a wound of moderate size often heals by first intention.

To sum up as shortly as possible, I would say that in the treatment of compound fracture, opening of joints, and large incisions, I advocate Lister's method with this modification, that the subsequent dressings after the first should be under the balsam spray rather than the carbolic spray, and that the material placed next to the wound should be dry, believing that the free use of the carbolic spray upon the wound, the washing out of the latter, as is too often done, with carbolic lotion, and the application of lac freshly moistened with carbolic lotion, all lead to a production of pus.

Next, that, as the almost equal success which is obtained in the hands of many surgeons from the use of Friar's balsam merely, in the dressing of small wounds, and even compound fractures, must be due as much to the avoidance of moisture, or rather of water, as it is to the antiseptic properties of the balsam, therefore it is a strong argument in favour of our being very chary in the use of the former.

Thirdly, that the application of the antiseptic principle in the dressing of burns, scalds, and lacerated wounds, with loss of skin, has led to no better results than many of the other methods in vogue.

And, finally, that in so far as we can keep an abraded surface free from all external agencies, just so far shall we succeed in facilitating the healing process. Amongst the external agencies which are injurious water takes a more prominent position than the atmosphere.

Therefore, the direction in which further advances in the dressing of large lesions is likely to be successful is certainly in the avoidance of heat and moisture.

Liverpool.

ON IDIOPATHIC (PERNICIOUS) ANÆMIA.

MICROSCOPIC CHARACTER OF THE BLOOD.

BY G. MACKERN, M.R.C.S., AND HENRY DAVY,
GUY'S HOSPITAL.

THE subject of these observations was a man aged fifty-three, under the care of Dr. Moxon, with whose kind permission we use the case. He was admitted on Sept. 23rd, 1876, and presented all the symptoms of idiopathic anæmia in a marked degree. There was great indisposition to exertion, with breathlessness and fainting on attempting it; great debility and loss of appetite; the whole frame was flabby; skin smooth, white and waxy; that of the face having the peculiar yellow tinge of lemon skin; lips and tongue pale and bloodless; pulse large and remarkably compressible, and a soft systolic murmur was present both at the apex and base of the heart. At times he became extremely low, wandering in his mind, picking the bedclothes, rattlings in the throat, and at these times it was interesting to remark how very yellow he became. He died quietly on November 24th, the post-mortem examination confirming the diagnosis, no lesion beyond œdema of the bases of the lungs being found.

The blood was examined microscopically many times and under varying conditions, when the man's temperature was 102°, 101°, 100°, 99·2°, when he was very low, and when he rallied, and precisely identical results were obtained with one exception. We would remark that this one exception was on an occasion about twenty-four hours before death, when patient's general condition appeared better than usual, and after he had been taking phosphorus for some days; on this occasion the blood presented the appearances to be described in a modified degree.

As to the *modus operandi*, great care was taken to eliminate sources of error due to coagulation, evaporation, and variations of pressure, all of which might tend to alter the physical state of the blood-corpuscles. Observations were made with a Stricker's and other warm stage, and counter experiments were made in cases of ordinary chlorotic anæmia, in a case of extensive lymphadenoma, and in one of advanced phthisis with a temperature of 100°, as an example of wasting disease.

The examinations were made in the morning by natural light, under a Hartnack, oc. 3, ob. 8, and the observations confirmed by several competent observers.

The appearances to be now described were observable as soon as the specimens were under observation, but were more marked about a quarter of an hour after the blood had been withdrawn from the body, although carefully protected from evaporation, &c.

1. The *red corpuscles* showed no tendency to collect into rouleaux, but formed instead masses of irregular shape. They were considerably reduced in number as compared with other specimens, but no actual calculation was attempted. They were very variable in size, and showed the greatest diversity of form. But few of normal shape and size could be seen in any one field; some were oval, others spindle-shaped, whilst many more could be referred to no particular shape. As regards size, some were much larger than normal, and this is especially true of those whose shape was much altered; others, again, were much smaller than normal, with round outlines for the most part, but many of these also were altered into the shapes before described. In all the abnormal corpuscles the normal uniform aspect was so far changed that the yellow substance appeared to be collected in some parts of the corpuscle, so that other parts were quite clear and transparent. This was especially true of those corpuscles from which processes passed out, the yellow colour of this latter part being in nearly every case more intense than that of the rest of the corpuscle. In no case did we actually observe any change in shape to take place, although some specimens were observed for an hour and a half on the warm stage. We believe this change of aspect, which we have described and figured, to be explained, and only to be explained, by a separation of the hæmoglobin from the stroma, or, as Brücke has termed it, of the zoöid from the œcoid. We compare this separation to that produced by the action of 2 per cent. solution of tannic acid on normal blood, in which, however, an astringent is acting on both the stroma and the hæmoglobin. In the case we have been describing, we believe that the stroma is abnormally soft (being perhaps very young, or else chemically altered); and the tendency of the corpuscles to assume abnormal shapes bears out this hypothesis; and this state of the stroma allows the hæmoglobin readily to coagulate and collect in parts, giving them the appearances we have described.

2. The *white corpuscles*. These were of two sizes, both of which could sometimes be observed in the same field. More often, however, the smaller corpuscles alone could be seen. There were (*a*) *large*, of similar appearance to those found in normal blood; never more than two were observed in one field, and in many fields they were quite absent. Examined on a warm stage they showed good amœboid

movement. (b) *Smaller*: These, much more numerous than the above, could be seen in nearly every field. Sometimes two or three could be observed at once, less often as many as seven, eight, or nine could be counted in one field. They were smaller than the red corpuscles of normal size,

The above woodcut roughly illustrates the description of the blood. A. Altered red corpuscles: the shaded portion representing the yellowish-red hæmoglobin; the non-shaded part, the lighter and in many cases perfectly clear stroma. B. The smaller white corpuscles. C. The larger and apparently normal white corpuscles. D. Yellowish-red homogeneous droplets, more or less numerous in every field.

and might be estimated as about one-quarter of the size of the large ones above described. They were granular, sharply defined, and looked more like free nuclei. Some were kept under observation for an hour and a half on a warm stage, but they exhibited no amœboid movement.

Floating about in every field were a larger or smaller number of bright homogeneous droplets, of irregular shapes and of a yellowish tinge.

Note.—Quincke, Byrom Bramwell, and others have described the shapes of the red corpuscles in idiopathic (pernicious) anæmia; but no mention is made of the separation of hæmoglobin from stroma—i.e., the disintegration of those important oxidising elements of the blood which we certainly found in the case we have now described.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

CHARING-CROSS HOSPITAL.

WOUND OF RIGHT UPPER EYELID FROM THRUST BY AN UMBRELLA-FERRULE; FRACTURE OF ETHMOID; LACERATION OF BRAIN; DEATH.

(Under the care of Mr. BARWELL.)

FOR the following notes we are indebted to Mr. Biden:—

B. S——, aged twenty-three, was taking part in a street brawl on Feb. 3rd, when he received a thrust in the face with the point of an umbrella, which knocked him down. He was picked up bleeding profusely from a wound of the right eyelid, but he was sensible, and requested to be taken to the hospital. About five minutes after the accident he was led, staggering as though under the influence of drink, into the accident room. His face was very pale, and the right side of it was partially concealed by a handkerchief soaked in blood, which he held up to his eye. On the removal of the handkerchief a circular lacerated wound, with inverted edges, and about the size of a sixpence, was discovered in the upper eyelid, immediately below the supra-orbital notch. The supra-orbital artery had evidently been divided, but the bony margin of the orbit and the eyeball were both untouched. The pupils were normal, and responded to light. He had no bleeding either from the ears or the nose; he had not been sick; he could answer questions when asked in a loud tone, but complained of pain in the head. The pulse was quick and feeble. He was forthwith sent to bed, and immediately fell asleep, and did not wake for several hours. When he awoke he became very restless, tossing about in the bed from side to side, and after continuing in this state for about ten minutes, he vomited about six ounces of black coagulated blood, after which he became quiet. He vomited three times more during the night, each time bringing up about an ounce of blood. After his first sickness blood commenced to ooze from the right nostril, and continued to do so throughout the night.

Feb. 4th.—11 A.M.: Had just vomited about an ounce of black coagulated blood. He was lying listlessly on his left side, in an attitude of general flexion. Could be roused with some difficulty, and gave his name; afterwards relapsing into a semi-conscious condition with a gesture of annoyance. Refused to take any milk or beef-tea. His eyelids were firmly closed; pupils equal, rather contracted, and responded slightly. Some blood about the nostrils. Respiration quiet; no stertor; pulse about 70, soft and full; temperature 104°. No paralysis; but when spoken to or otherwise disturbed he had clonic spasms of the arms and legs. Micturated consciously.—12 noon: Could be roused only with great difficulty. Would not give his name. Very restless, tossing about in bed. The spasms still continued, but less regularly and with diminished intensity. Pulse not so full, and harder; temperature 101·4°. Had vomited no blood since 11 A.M.—2 P.M.: Could not be roused; very restless. Eyelids still firmly closed, but pupils dilated, and still responding. Pulse quicker, smaller, and weaker; skin dry; temperature 105°. Spasm of limbs ceased.—4 P.M.: Lying on his back; face getting livid. Eyelids half open; pupils contracted, and did not respond. Slight stertor. Respiration slow and shallow, with an occasional deep sigh; pulse small, quick, and feeble; skin dry; temperature 104°. The pulse and respiration gradually became more feeble, and he died at 4.10 P.M. (fifteen hours after the receipt of the injury.)—5.10 P.M.: Temperature 103·6°.

Autopsy, forty-six hours after death.—The body was that of a sound and strong young man. No morbid appearance, except a small wound in the right upper eyelid, in which a probe passed backwards and slightly inwards. The calvaria being removed, a quantity of dark blood was found effused under the arachnoid, and covering both lower surfaces of the anterior lobe, more especially on the left side. The brain being removed, a comminuted fracture was found on the right cribriform plate of the ethmoid, and the adjacent part of the frontal orbital plate was chipped. The top of the crista galli was broken off. On examining the brain there was found on the right side nothing abnormal beyond the subarachnoid effusion. On the left side, involving the olfactory tract and groove, was a laceration of the brain which at first appeared quite superficial, but on further examination was found to pass deeply into the hemisphere, and to end probably close to the anterior cornu of the lateral ventricle, which was full of blood.

Mr. Barwell gave the following interpretation of this injury. He thought that the small punctured and not lacerated wound of the eyelid showed that the first impulse of the thrust was received straight from the front, and that a rapid impulsive turning away of the head caused the ferrule, which of course continued in the same course, to be received in an oblique direction inward, and thus the weakest part of the orbit, the os planum, was presented to the force. The train of symptoms, though obscure, was full of interest.

GREAT NORTHERN HOSPITAL.

CASE OF FETID DISCHARGE FROM NOSE, TREATED BY A NEW OPERATION.

(Under the care of Mr. HARRISON CRIPPS.)

A. B——, aged thirty, probably syphilitic, struck the bridge of her nose five years ago in falling against the corner of a table. She suffered considerable pain at the time, and hæmorrhage was profuse. The nose remained tender and swollen for two or three months, and the nasal

passages became so much obstructed that she was scarcely able to breathe through them.

Six months after the injury a fetid discharge from the nostrils commenced, and continued up to November last, when she first presented herself at the hospital. The nose was at that time considerably flattened, and both nostrils were reduced to little more than pin-hole apertures. The soft parts between the nose and upper lip were deeply ulcerated, and flowing over this ulcerated surface from the nostrils was a thin ichorous discharge. The fetor arising from the discharge was beyond all description, and pervaded the room to an extent scarcely bearable. She complained bitterly of her condition, being an object of aversion to all her friends. The introduction of a probe into the nostrils was a matter of some difficulty, and caused much pain. On the first examination no dead bone could be detected. The patient was ordered full doses of the iodide of potassium, and directed to wash out the nasal cavities thoroughly with Condy's fluid, applied after Thudichum's method. She continued under observation till the middle of January, but without any marked amelioration in her condition. As dead bone could at this time be detected with a bent probe, and the patient was anxious that something should be done to relieve her, she was operated on according to the plan advocated by Rouge, of Lausanne.

Chloroform having been administered and the patient placed on her right side, the right corner of the upper lip was seized by the operator, and the left by his assistant; by this means the lip was everted and drawn upwards, while the soft parts were separated by a clean sweep of the scalpel, cutting upwards with its edge kept close to the bone. This incision extended from the second bicuspid tooth on the right side to that on the left. By drawing upon the upper lip, the nose, together with the soft parts forming the anterior portion of the face, could be easily raised in such a manner as thoroughly to expose the nasal fossæ. The accompanying diagram fairly represents the

view obtained. A large quantity of dead bone could now be both seen and felt. The dead portions of the bone were quite loose, and were easily removed with the finger and polypus forceps. After the removal of the bone, the forefinger could be passed quite back to the posterior wall of the pharynx, the cavity feeling soft, velvety, and entirely free from dead bone. The operation was completed by replacing the lip in its natural position and retaining it there by a single strip of plaster placed transversely across the face. There was scarcely any bleeding during the operation. The wound healed rapidly by first intention, without the slightest scar or deformity. Six days after the operation a careful examination failed to detect the line of incision, so complete had the union become. The patient has been seen many times since; all discharge has ceased, the ulceration of the upper lip has healed, and there is not the least fetor to the breath. The pieces of bone removed comprised a portion of the left palate, the left inferior turbinated, and a considerable portion of the vomer. These pieces were thickly coated with a hard, mortar-like substance, exhaling a most fetid odour.

That this method of operating is one of the greatest value and importance cannot be doubted, and would seem justifiable not only in cases of ozæna, but also in some cases of polypi or other growths, for the entire removal of which a considerable space and more complete view are necessary.

Ozæna, according to the most recent observations, is dependent in the large majority of cases on a sequestrum or carious portion of bone, and it is not impossible that some of the remaining cases, supposed to be due to a constitutional cause, really arise from a local, although undetected, source of irritation. For many of the cases narrated by Rouge an examination prior to the operation had failed to detect a cause, but after the anterior nares had been exposed in no case did he fail to find a sequestrum or carious portion of bone. In one instance a portion of the bony septum was found dead, lying between the two layers of mucous membrane, a condition of things which accounts for its not being detected prior to the operation.

In the case above narrated it was not found necessary to cut through the cartilaginous septum at its attachment to the anterior nasal spine, it having been previously destroyed by disease, but in ordinary cases before the nose can be lifted this should be done with scissors.

The ease with which the operation was performed, the thorough exposure of the nasal fossæ, the absence of hæmorrhage, and the beneficial results obtained entirely agree with the cases described in the able paper by Rouge.

WEST LONDON HOSPITAL.

EXTENSIVE ASCITES AND HÆMATEMESIS; IMPROVEMENT UNDER THE USE OF BALSAM OF COPAIBA.

(Under the care of Dr. THOROWGOOD.)

THE subjoined notes should be read in conjunction with those published at page 569.

George K——, aged thirty-eight, a ship's carpenter, was admitted December 11th, 1876. The patient had always been a great drinker of beer, but had seldom taken spirits. He had spent five years in India and China. About four months before admission he found his face swelling, and he was conscious of tightness round his abdomen. His legs and feet also took to swelling, but after a short time this diminished. His abdomen continued to swell till it had attained its present size, about forty inches at level of umbilicus. The scrotum also swelled.

On examination the abdomen was very tense and dull, a marked depression was noted above the xiphoid cartilage, the abdominal veins were distended, dulness extended up into the right axilla, and fluctuation was marked. The heart-sounds were normal, but rather obscure; nothing special was noted in respiration. Urine high-coloured, acid, sp. gr. 1010, free from albumen and sugar. Pulse 84, strong and regular. Tongue dry and furred; complexion and conjunctivæ yellow; bowels open; no special pain anywhere.

The scrotum and penis were punctured at once with a needle. Ordered a mixture containing thirty grains of sulphate of magnesia, five of bicarbonate of soda in peppermint water, three times a day, and five grains of compound squill pill every night. His craving for a stimulant, as he felt very sinking, was appeased by giving him three ounces of unsweetened gin in twenty-four hours.

The daily notes record slow amendment, but not much diminution of size.

On Dec. 25th the tongue was clean and moist, and the sulphate of magnesia was increased to sixty grains to keep up moderate purgation. No marked diminution in girth of abdomen as yet recorded. He was well enough now to sit up.

Dec. 26th.—Commenced the following mixture: twenty drops of copaiba balsam and of spirits of nitrous ether in cinnamon-water three times a day.

Jan. 5th.—The mixture agrees well; he passes urine very freely, and feels easier for the medicine.

6th.—Abdomen measures thirty-seven inches round.

8th.—Abdomen thirty-six inches. This day he vomited half a chamberpotful of black blood; his pulse was 112, and he felt a good deal exhausted. This vomiting continued at intervals till the next day. His medicine was now changed to a mixture of thirty drops of liquid extract of ergot and fifteen drops of dilute sulphuric acid every four hours.

10th.—Vomiting entirely ceased; says he feels perfectly well; abdomen now has become soft, and measures thirty-five inches. Sulphate of magnesia mixture again ordered, and from this time he steadily improved.

On Jan. 16th he measured thirty-three inches, and on the 28th he left the hospital, saying he "felt better and smaller than he had felt for many a long day." Abdomen was now soft and resonant, but still contained a little fluid. Spleen did not now appear enlarged.

On Feb. 6th he was seen as an out-patient. He looked yellow; tongue clean; appetite good; pulse 96; bowels regular; he was following the instruction given him to abstain from all stimulants. Hepatic dulness extended up to the level of nipple; posteriorly respiration was normal. To take nitro-hydrochloric acid with taraxacum.

Remarks.—In this case the copaiba mixture seemed to agree well. It increased the flow of urine, and the dropsy perceptibly diminished. The severe attack of hæmatemesis seemed of service in relieving hepatic congestion, as his progress afterwards was rapid and good. It is well known that in many of these cases of severe hæmatemesis no visible rupture or ulceration of vessel is present. Dr. Hughes Bennett recorded a case where, post mortem, a large clot, weighing between two and three pounds, filled a man's stomach; and yet the most minute inspection failed to reveal the slightest lesion to which this extensive hæmorrhage could be attributed.

The enlargement of the liver was probably of the nature of cirrhosis, with obstruction to the secretion of bile; hence the jaundiced hue which the patient always had. The man had been a great drinker of beer, but stated that he had rarely taken spirits. In another similar case of extensive ascites with cirrhosis and albuminuria, the patient, who was a dock labourer, informed Dr. Thorowgood that while he had seldom taken less than three quarts of beer per day, he scarcely ever took any kind of spirit. Doubtless, beer taken in large quantity on an empty stomach is a very certain cause of chronic liver disease and abdominal dropsy. The best plan of treatment appears to be, first to reduce abdominal plethora and congestion by small doses of sulphate of magnesia or soda, and then, for a change, to act on the kidneys with diuretics, and one of the best to use is the balsam of copaiba.

SUSSEX COUNTY HOSPITAL, BRIGHTON.

DISEASE OF THE CEREBRUM; BLINDNESS; DEATH.

(Under the care of Dr. W. KEBBELL.)

THE subject of this disease was a young woman aged twenty, who was admitted into the hospital in a state of general ill-health. She was pale and anæmic, and there had been an absence of the catamenia for several months, which continued up to the time of her death. Her appetite, however, was good, and with the exception of weakness and a general feeling of discomfort, she complained of nothing but a slight pain in the forehead and defective sight, the right eye being the worst. Both pupils were much dilated, the right more so than the left, and she said that the sight of the right eye began to fail first.

Several plans of treatment were tried, but without any effect. She continued to get gradually weaker, her sight became worse, and in about two months from her admission she had become quite blind. Her condition up to the time of her death, which was seven months from the time of her admission, was this:—She had repeated severe attacks of bilious vomiting, throwing up large quantities of bile. Latterly she had occasional severe attacks of delirium, attended with fright and all kinds of delusions, which lasted several days. During the intervals of these attacks she was quite collected—in fact, the intellect was unaffected. She took her food fairly, there was no defect either in sensation or motion, but she always complained of a severe pain in the centre of the forehead. She was delirious for a fortnight before death, and had several attacks of convulsions, but the nurse alleged that she became conscious a short time before death.

On examining the brain after death, the membranes and the entire surface of the organs were, as far as could be determined, quite healthy. On making a perpendicular incision through the anterior and middle lobes of the cerebrum a large cavity was found. The cavity contained a soft, yellowish fluid, of about the consistence of cream, without any trace of natural brain structure, and it extended through the tubular portion of the anterior and middle lobes to the extent of about three and a half inches. The diseased area passed insensibly into the healthy surrounding parts.

In his remarks on this case Dr. Kebbell said that he could not undertake to name the nature of the disease, but it was probably yellow softening. This case illustrated, doubtless, some points in the physiology of the brain very satisfactorily. The disease being confined entirely to the tubular or white portion of the cerebrum, the intellect was unaffected, as were also motion and sensation. Had the disease been in the grey or outer surface of the cerebrum, or in the corpus striatum, optic thalamus, or medulla oblongata, the reverse would have been the case; the sensory and motor powers would have been deranged, and the intellect impaired. It was strange that the sight should have been lost. The corpora quadrigemina are well known, or, rather, are generally supposed, to be the nerve-centres of the organs of vision; but these, together with the optic commissure, were, to all appearances, quite healthy.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

THE ordinary meeting of this Society was held on the 1st inst., the President, Dr. Murchison, in the chair. Several specimens were exhibited, amongst them a rare specimen of gummata on the cranial nerves in an infant, by Dr. Barlow, and examples of epiphysial disease in congenital syphilis, by Mr. Haward. The last half hour was apportioned to Dr. Creighton, who described his researches into the physiological and pathological changes of the breast. He exhibited a number of microscopical specimens illustrative of his communication.

The proceedings commenced by the exhibition by Mr. Barker of some unusually large Vesical Calculi, which he had removed from a patient sixty years of age. The interest of the case lay chiefly in its clinical features, the patient having four years previously been under the care of Mr. Nunn, who performed lithotrity.

Dr. FELIX SEMON showed a specimen of Aneurism of the Thoracic Aorta, and read a most exhaustive account of the clinical details of the case. The patient, a man forty years of age, applied at the Hospital for Diseases of the Throat, suffering from pain in the chest, especially on the left side, palpitation, and dyspnœa. He also suffered from dysphagia, which had come on after a fainting fit two months before. The physical signs pointed to an aneurism of the descending thoracic aorta; and it was to be noted that laryngoscopic examination showed no impairment of action of the vocal cords, nor any forward bulging of the trachea. The diagnosis was fully confirmed, there being a fusiform aneurism of the descending aorta, extending from the fourth to the sixth vertebra. It had ruptured into the œsophagus, the perforation being closed by clot.

Dr. THOS. BARLOW showed some specimens of Gummata on Cranial Nerves and Changes in Vessels in Congenital Syphilis. The subject was a male infant fifteen months old,

born at full term. The mother was weakly, but presented no evidences of syphilis. The child had a narial discharge from its birth, and, when two weeks old, was said to have had thrush. It suffered also from diarrhœa, and was extremely emaciated. There was slight nystagmus of both eyes, of a coarse character and not constant; the pupils were equal, and the discs healthy. There was slightly marked left facial paralysis. The diagnosis was cerebral tumour, probably tubercular; and consequently no anti-syphilitic treatment was pursued. But on post-mortem examination no tubercle was found in any part, and beyond a few patches of cicatricial thickening of the capsule of the liver, and one on the spleen, no visceral changes existed except in the brain. That organ was not markedly atrophied, and nowhere softened; but each of the third, fourth, fifth, sixth, seventh, and eighth nerves was the seat of a tolerably uniform enlargement at its superficial origin. The change was perfectly symmetrical. Microscopically there was found entire atrophy of axis-cylinders, and their replacement by a new formation of small round cells, with in places a few bodies resembling corpora amylacea. To the naked eye the changes are not unlike those of leprosy; but in leprosy the change takes place chiefly in the interfunicular tissue, and there is less destruction of nerve tubules. The basilar artery and all the vessels composing the circle of Willis were thickened and opaque along their whole length, not nodulated nor calcified, but their lumen much narrowed. The adventitia and muscularis showed cellular infiltration; but the changes between the endothelium and elastic layer of the interior were most marked, resembling those described by Heubner. The arteries of the second order were unaffected. Dr. Barlow believed this to be the first case in which gummata occurring on nerves in congenital syphilis had been recorded; but he remembered seeing at University College Hospital an example of symmetrical gummata upon cranial nerves, and in the debate on syphilis last year Dr. Moxon referred to a similar case. It was interesting that these lesions, usually regarded as tertiary, should be symmetrical; and the case was also important as being another instance of disease of the nervous system in congenital syphilis. In this case there was no affection of the meninges similar to the specimen which he exhibited earlier in the session.—Mr. SPENCER WATSON had recently under his care a child two or three years of age, presenting marked nystagmus. Both parents were syphilitic, and the nystagmus was cured by mercurial treatment. Possibly there might have been gummata on the cranial nerves in this case. He did not think it uncommon for children, the subjects of congenital syphilis, to have nystagmus, which was possibly often due to impaired vision from disease of the choroid.

Dr. MAHOMED showed two specimens of Syphilitic Disease of the Lung. The first was from a female seventeen years of age, who died from erysipelas and pyæmia. There were gummata in the liver, spleen, and brain; the kidneys were granular and amyloid, and the intestines also amyloid. Both lungs were irregular, puckered, pale, and mottled, and the limited patches of cicatricial thickening which each presented were composed of fibro-nucleated tissue surrounding vessels and invading the alveolar walls in the vicinity. In the midst of the fibroid tissue was a greatly thickened artery, the thickening being chiefly in its muscular coat. The other patient died from intestinal obstruction due to syphilitic ulceration of the rectum. In this case there was marked stenosis both of the tricuspid and mitral orifices of the heart. The lungs presented fibroid patches, with much nuclear growth around bloodvessels. The specimens showed the earliest stages of fibroid growth, neither of the cases being so far advanced as those described as "syphilitic phthisis" by Dr. Goodhart. In answer to the President, Dr. Mahomed added that in the second case there was a distinct history of syphilis, and, moreover, gummata in the brain, liver, and spleen.

Mr. NUNN exhibited, for Prof. Charcot, of Paris, some sections of spinal cord in Muscular Atrophy. The one was from a case of progressive muscular atrophy, where the anterior columns were affected secondarily to the change in the anterior grey cornua; and the other, where changes commencing in lateral columns (descending sclerosis) were not accompanied by muscular atrophy until the anterior cornua became involved. He also showed specimens of the phrenic nerve from a case of progressive muscular atrophy in which the diaphragm was much wasted. The nerve tubules had also shared in the atrophy.

Mr. WARRINGTON HAWARD showed specimens of Epiphysial Disease from a case of Inherited Syphilis. The specimens showed the disease in various stages, from a simple vascular line at the epiphysial junction to complete separation of the epiphyses. When ten weeks old the child was observed to have lost power in its right arm, and next day a rash was noticed over the nates. Both arms were powerless when Mr. Haward saw the child, and there was a swelling on the posterior and inner aspect of each elbow. The infant was pale, and suffered from coryza. Both parents suffered from osteal pains, and their first child is one of the worst cases of inherited syphilis Mr. Haward has seen. After the birth of the first child the mother had two miscarriages, then a child was born which lived only two days, and three others following were said to be healthy. The present case was the sixth born alive. The child contracted bronchitis on its way to the hospital, and died in two days. Except for the bronchitis and pulmonary collapse, the viscera were quite healthy. The head, however, could not be examined. There was a collection of laudable pus around the lower end of each humerus; the synovial membrane was healthy, but the epiphyses at the ends of the bones entering into elbow-joint were all more or less separated by granulation tissue and pus. Mr. Haward said this condition was not infrequent in inherited syphilis, and was sometimes the only sign of the disease. It usually yielded rapidly to mercurial treatment. It was accompanied by a form of pseudo-paralysis, and in its early stage was marked by a swelling limited to the epiphysial line. The lesion has been described by Wegner, Parrot, and others, and quite lately by Dr. R. W. Taylor, of the United States. Its amenability to treatment was very marked, and although resembling rickets at first sight, there were not the other symptoms of that disease—e.g., bending of ribs &c. It was important to recollect that it might be the only symptom of syphilis presented by the child.

Dr. CREIGHTON, in commencing his remarks upon the "Physiological and Pathological Processes of the Mamma," said that the specimens he exhibited illustrated the minute changes undergone by that gland in its state of normal functional activity and quiescence side by side with others in which morbid changes and especially the growth of tumours were shown. The specimens from the normal gland belonged to the two periods in the life-history of the breast—viz., its involution from the condition of full functional activity to complete functional inactivity, and the period of its unfolding or evolution, that namely which, co-extensive with pregnancy, immediately precedes the period of suckling. His investigations showed that the decrease in size of the gland during its involution was not a kind of atrophy, but a most orderly and regular process—a sort of "up-folding," whereby the whole secreting structure was reduced in bulk, and its function gradually subsided. The time taken for involution was from four to six weeks, and during this period cellular products continued to be formed, which, no longer being utilised, were to be regarded as waste products. The two processes of involution and evolution could be divided into stages, which were strictly comparable the one with the other, and characterised by formation of products in an inverse manner. When functional activity is beginning to be re-established the acini become filled with large yellow spheroidal nucleated cells of the same size as the epithelial cells of the perfect structure; they are products, as it were, of immature secretion, and are similarly formed in the final stage of involution. As the gland continues to increase more and different cells are produced, at first mucus cells, and finally full-formed milk cells. He had found in mammary tumours in the dog the same kind of yellow pigmented cell as a pathological product, and although he had not met with it in tumours of the human breast, he pointed out that this form of cell was not the only kind of waste product present in the evolution of the gland. This waste product was disposed of by the lymphatics, and he showed specimens of lymphatic glands in which the sinuses were filled with these yellow cells. In the lymph glands they appear to be utilised by becoming converted into lymphoid corpuscles, and in that way the

condition of physiological leucocytosis observed during pregnancy might be accounted for. Applying this to pathological processes, and finding cells resembling these waste products of a gland in normal evolution, it was reasonable to suppose that the effect of a pathological excitation upon the gland in the wasting state (and pathological processes generally arise in the gland when it is quiescent, being most frequent in aged animals, when the functional activity has been long in abeyance) was to start the breast upon a course of evolution. The extended mammary gland of the bitch was eminently favourable for such investigations, as in it frequently the tumour-structure and normal gland-tissue could be seen side by side, and the changes set up at the spreading margin of the tumour were observed to be similar to those produced in the normal evolution of the gland. Some of his preparations from such diseased breasts showed pigmented cells in the acini, as in the healthy animal; and others showed an exuberant growth of these pigmented cells to form papillary processes, and from this a transition to groups of cells contained in the fibrillar tissue outside the gland structure. In dogs the tumours are almost wholly composed of these yellow cells, but in some preparations other forms of "waste-cells" could be seen. In conclusion, Dr. Creighton said that this investigation pointed to cancer of the breast being referable to disordered functional activity of the gland, and in that way his hypothesis was preferable to any other theory of the etiology of cancer, as affording some sort of motive for the exuberant growth. This view, however, dealt only with the cellular changes undergone by the organ in its physiological state, and did not regard the chemical changes. As to other organs which became the seat of morbid growths, it would be possible, no doubt, to show that in them also the pathological changes were linked to the physiological, and he might instance the cervix uteri and the stomach as favourite seats for cancer, and also most liable to catarrh.—The PRESIDENT, in thanking Dr. Creighton for his communication, pointed out that Dr. Creighton had also shown that in cancer of the liver the new cells were derived by a process of endogenous formation from the cells of the gland itself.—Mr. BUTLIN had but rarely met with the yellow pigmented cells in cancer (mammary or other) in the human subject. He had, however, seen them in a few cases—notably in one of sarcoma of the leg—with secondary infiltration of the pleura and lymphatic glands. In that case the lymph-sinuses of the glands were largely occupied by yellow cells, which he regarded as products of degeneration of the spindle-cells composing the tumour. It was noteworthy that the tumour itself contained very few of these cells.—Mr. KNOWSLEY THORNTON had met with similar yellow-coloured cells in the corpora lutea of the ovary, and after the publication of Dr. Creighton's paper in the Privy Council Reports, he sought for an explanation of their appearance in the development of the Graafian follicle. The results of his research were negative, for he never found them in the advancing Graafian follicles, but always in degenerated corpora lutea, so that he had looked upon them as products of degeneration. He had found them in lymph-spaces of the ovary, far removed from corpora lutea. He asked whether Dr. Creighton thought the yellow cells to be formed as such, like epithelial cells, or whether they merely represented stages of degeneration of the epithelial cell.—Dr. CREIGHTON confirmed Mr. Thornton's statement as to the identity of the cells in corpora lutea with those found in the breast; but at present their appearance in the former structures was a mystery. As regarded the breast he had no hesitation in stating that the yellow cells were transformed epithelium; it was clearly shown in his preparations, where some of the cells covering projections were perfectly columnar. They were not a degeneration of epithelium, but an immature product of the process of conversion of the epithelium into the secretion, and were strictly comparable to the solid form of secretion found in the mammary glands of the invertebrata. Goodsir had long ago pointed out that in the invertebrata there were three types of secretion,—viz., 1st, in which the material was solid, or wholly cellular; 2nd, partly cellular and partly fluid; and 3rd, wholly fluid; and these varieties of secretion represented the various degrees or stages followed in the mammal in the evolution and involution of the mammary gland.

The Society then adjourned.

CLINICAL SOCIETY OF LONDON.

THE ordinary meeting of this Society was held on the 27th ult., Mr. Thomas Bryant, V.P., in the chair. Several communications of interest were read, including one by Mr. Moore King, upon the case of the late Miss H. Martineau, and another by Mr. Spencer Wells upon the same subject. Some discussion arose out of a case of ascites in a child, read by Dr. Day, in which the resin of copaiba was resorted to with good result. Dr. Day's interpretation of the cause of ascites in children was disputed by several members. Dr. Southey read an interesting case of idiopathic tetanus, and also described a novel adaptation of a fine trocar and drainage-tube to the operation of acupuncture in anasarca, an innovation which bids fair to obviate the ordinary risks at present obtaining in that procedure.

Mr. CHRISTOPHER HEATH read notes of a case of Badly United Fracture of the Leg, treated by excision of a wedge. The patient, who was shown to the Society, was a man forty-six years of age, who, eighteen weeks before admission, had sustained a fracture of both bones just above the ankle. It was treated with splints and a starch bandage, but great deformity resulted, the foot being twisted outwards, and the tibia thrust in, the fibula being correspondingly distorted. The condition was shown by photographs and a cast. Under antiseptic dressings Mr. Heath removed a wedge of bone from the tibia with Linhart's chisel, and divided the fibula with bone-forceps. The limb was then brought straight, and treated at first with a back-splint, and afterwards with side-splints. The patient recovered with a very useful limb. Mr. Heath commented on the fact that the antiseptic dressings were not closely applied to the limb, but *outside* the splint, without any ill result.—The CHAIRMAN congratulated Mr. Heath upon the good result of his operation, especially as the difficulty was enhanced by its proximity to the ankle-joint.

Dr. CAYLEY (the hon. secretary) then read a "Note on the Case of Miss Harriet Martineau," by W. Moore King, communicated by the President. The author had taken charge of the case since April, 1871, on the death of Mr. Shepherd. He was told that, sixteen years before, Dr. Latham had diagnosed fatty degeneration of the heart, which the patient thought had increased so much in size as to displace other organs. There had also been much trouble from hæmorrhoids. Miss Martineau was then fairly well, but confined to the house; she had a good appetite, but still she had little taste and no sense of smell, and complained of a sense of unreality in herself, and that at times she could only see the halves of objects. She was, however, well occupied in correspondence and in reading, &c. There was some wasting, and, although loosely clothed, her abdomen could be seen to be much enlarged. There was a well-marked arcus senilis; with feebleness and occasional irregularity of the cardiac sounds. Much later, Mr. King learnt that some twenty years previously the patient was declared to have had a tumour, which she fancied had been cured by mesmerism. Although unable to examine carefully into the nature of this tumour, the existence of which the patient herself always scouted, Mr. King was enabled once to satisfy himself that the abdominal enlargement was due to the presence of some tumour, and to this also all the other distressing symptoms, arising from displacement of organs, must be attributed. The treatment, confined to the relief of these symptoms, consisted largely in the administration of opium, which had to be given in large doses, attempt at their reduction being productive of painful nervous symptoms. The patient had become so habituated to the taking of opium that as much as twelve to fifteen grains daily were resorted to in various forms, the largest single dose being equivalent to three grains of opium. Irregular action of the bowels, occasional bleeding from the hæmorrhoids making great inroads on her strength, the increasing size of the abdomen, œdema of legs and thighs, painful cramps,

and increased drowsiness, were the latest symptoms. Miss Martineau was only confined to her bed for three days, when she ceased to take food, and gradually sank from exhaustion. She appeared conscious, but remained with her eyes closed, and scarcely speaking during the last two days. The post-mortem examination was made on June 29th, and circumstances did not permit of its being very complete. The abdomen only was examined, and the lower two-thirds of its cavity found to be occupied by a large somewhat pear-shaped tumour, eleven inches in its largest diameter, and attached by a pedicle formed by the left broad ligament. Its contents were some brown fluid, and a quantity of pulpy material, of a light greyish-brown colour. The diaphragm was much arched, the liver, stomach, and intestines being greatly displaced upwards. The kidneys were normal, and also the uterus.

Mr. SPENCER WELLS read a paper entitled "Some Remarks on the case of Miss H. Martineau." He said that Mr. Higginson, of Liverpool, was present, and had brought for exhibition to the Society the unilocular ovarian cyst described in Mr. Moore King's paper, and also a specimen of the contents of the cyst. This material, of which there was as much as ten pounds in weight, was composed almost entirely of cholesterin, epithelial scales, and short hairs, so that the cyst was of the dermoid variety. From the shape of the cyst it was evident that its lower and smaller end must have been accurately modelled to the cavity of the pelvis; and it was probable that its original position behind the uterus had led to the primary supposition that it was that organ which was affected. The account of the case published at the time by Dr. T. M. Greenhow (now of Chapel Allerton) in THE LANCET—where much correspondence is to be found in relation to the alleged "cure,"—and referring to the period between 1839 and 1845, speaks of the tumour as distinctly uterine. In her autobiography Miss Martineau repeats this view, saying that (in 1839) she was suffering from a disease that had been in progress for years, a tumour being found of "a kind which usually originates in mental suffering." There was no doubt that the opinion of Sir Charles Clarke and Dr. T. M Greenhow at this time was that the case was one of retroversion of the uterus; and Mr. Wells quoted from a letter written by the former in 1841, in which he speaks of the disorder as an enlargement of the body of the uterus, not yielding to external applications or internal medication. In 1841, and still later, in 1845, it was noticed that the uterus was less firm and more yielding in its substance. As the event proved, however, the uterus was found unaffected, and even small; so that there could be no doubt that all the symptoms were due to the ovarian cyst, which, at first low down in the pelvis, had eventually risen up into the abdomen. Mr. Wells said that, although he did not agree with the view propounded by Dr. Greenhow as to the pathological nature of the tumour, it was to the clinical features of the case that he wished to address himself. Firstly, there was the formation of the tumour low down in the pelvis; and its escape therefrom, after the patient had spent three or four years on a couch under treatment by mesmerism, gave rise to the fallacy that a cure had been effected by that agency, and it was asserted at the time that her medical attendants did not know what was the disease from which she suffered. Secondly, in 1855, the patient consulted Sir Thomas Watson, who had kindly allowed Mr. Wells to make use of the notes he then recorded. She was then supposed to have been cured of the tumour, and to be suffering from symptoms of heart disease, and it was for the latter that she consulted him. His notes mention that on Jan. 31st, 1855, Miss H. Martineau, aged fifty-three, consulted him. The catamenia had ceased three years before. For one year or more she had suffered from shortness of breath on exertion, especially in ascending, and she complained of intermissions and boundings of the heart, and occasional twinges of pain at the back of the neck. There was marked vertical arcus senilis. Pulmonary sounds were natural; the first cardiac sound noisy; urine pale, 1011 or 1012, no albumen. Sir Thomas also notes that there is a large, pear-shaped, indolent tumour in the abdomen, reaching from the pelvis to as high as the lower part of the epigastrium. He told her there was nothing the matter with her heart, and yet in the "Autobiography" she publishes her belief that that organ was affected, and, thinking herself to be at the point of death, lived the remaining twenty-one years of her life a confirmed invalid. Thus, concluded Mr. Wells, it was evident that her symptoms were all due to the presence of an ovarian tumour, which, not recognised as such in 1839, because of the imperfection of uterine diagnosis in those days, and supposed to be cured by mesmerism, continued to enlarge, and to displace the abdominal and thoracic organs. Free from adhesions, it was a tumour which might have been removed with safety, and twenty-two years of a useful life might have been more happily spent than as a confirmed invalid in the near prospect of death.

[On the motion of the Chairman, thanks were accorded to Mr. Moore King and Mr. Spencer Wells for their communications.]

Dr. DAY read a case of Ascites in a Child, cured by Paracentesis and Copaiba. The patient, aged five years and a half, was admitted into the Samaritan Hospital under his care on October 4th, 1875. She was one of ten children, all born healthy, and never had whooping-cough, measles, scarlet fever, or peritonitis of any degree or kind. Three months previously she first complained of pain in the stomach, when the body was noticed to be large, and it had increased in size till the time of admission. Two inches above the umbilicus the measurement was twenty-four inches, and the area of liver dulness was apparently increased, but the outline could not be felt from the amount of fluid. The lower lobes of the lungs were dull on percussion from pressure. Pulse 120; respiration 32. The urine was acid, and threw down a copious deposit of white lithates; sp. gr. 1032; no trace of albumen. Bowels free. A diet of milk, beef-tea, and eggs was ordered; ten grains of compound jalap powder every morning, and the syrup of iodide of iron three times a day. On Oct. 20th she was thinner in the limbs and more pinched in the face; the umbilical measurement was twenty-eight inches, and the superficial veins of the abdomen were slightly distended; the urine still contained an abundance of lithates. Tincture of digitalis and citrate of potash were ordered three times a day, and the iron omitted. On Nov. 5th the abdomen measured twenty-eight and a half inches. An aperient powder of sulphate of potash and powdered rhubarb was prescribed every other morning, the digitalis was discontinued, and the iron resumed. On the 17th, as the kidneys were not acting so well and the superficial veins were even more enlarged and tortuous, his colleague, Mr. Knowsley Thornton, tapped the abdomen and drew off eighty-four ounces of a straw-coloured syrupy fluid, like ordinary ascitic fluid. No enlargement of the liver or spleen could be felt. On the 24th (seven days after tapping) the urine was clearer, and the average quantity was from nineteen to twenty-three ounces in the day and night. On Dec. 1st, the urine being clear and bowels free, the tincture of perchloride of iron, in ten-minim doses, was ordered three times a day. On the 26th, she was again increasing in size, and there was a considerable quantity of free fluid in the abdomen. She measured 27 inches round the abdomen. Copaiba was now commenced. On January 5th, 1876 (ten days after commencing the copaiba) the urine was clear and free. Umbilical measurement was 25 inches. On the 26th the measurement was 23½ inches. On March 9th the subcutaneous tissue was more developed, and the umbilical measurement 23 inches. On the 26th the measurement was 22 inches; on May 20th the abdominal measurement was 22¼ inches, and the limbs firm and strong. She had taken the remedy uninterruptedly for five months, and no other drug, and on the 4th of June she was in every respect well. The author considered the ascites was of a chronic character, due to cachexia and anæmia, or to some morbid condition of the capillary vessels, in the absence of glandular disease within the abdomen. He inquired the cause of the large belly in delicate children, and thought that it was often attributable to the accumulation of flatus, as the product of ill-digested food, and sometimes attended with more or less secretion of peritoneal fluid. He thought that ascites was sometimes a primary disease, independent of any visceral disorder. If paracentesis is advisable, it ought to be performed before the abdomen is enormously distended. To remove the accumulated fluid in such cases, and so to restore, for a time at least, the normal balance betwixt effusion and absorption, is as rational, it appeared to him, as to bleed in cases of great distension of the right heart, when we have reason to know a balance is once more so restored.—

Dr. BURNEY YEO said that at present he had under his care a case of ascites somewhat resembling Dr. Day's, there being no evidence of any visceral disease. The patient was a male, twenty-three years of age, and the ascites had gradually supervened during a period of eight weeks, there being no evidence of hepatic disorder or struma. Dr. Yeo thought the case probably one of subacute or chronic peritonitis, especially as the patient dated the commencement of the dropsy from an attempt to return a hernia, which was effected with difficulty.—Dr. GREEN said that he had last year under his care a boy eight years of age suffering from ascites, evidently due to induration of the liver. Paracentesis was followed by rapid reaccumulation. Dr. Barlow, who subsequently took charge of the case, prescribed the resin of copaiba in doses of twenty grains per diem, and in the course of three or four weeks the ascites had almost completely disappeared, and at the same time the urine had increased in quantity. There has been no recurrence of the ascites. Dr. Green thought all cases of considerable ascites were dependent on portal obstruction, and considered that the recovery in his case was probably due to re-establishment of the circulation.—Mr. HOWSE thought that the evidence in Dr. Day's case of the curative power of the copaiba was rather an instance of *post hoc*; for undoubtedly in some cases (as one of extreme ascites in which a single paracentesis was followed by no reaccumulation) simple tapping alone is sufficient. The improvement in the case was rather coincident with the administration of the copaiba, for although the quantity of fluid diminished, yet there did not seem to be any direct influence on the urine. Probably it acted simply as a tonic. The case may have been one of chronic peritonitis, and the very slight rise of temperature favoured this; whilst the fluid accumulation would account for the absence of pain. If due to chronic peritonitis, the exudation of fluid must be regarded as protective.—Dr. MAHOMED had lately seen three cases in the post-mortem room in which the mesenteric glands were enlarged and chronically inflamed without any corresponding lesion in the intestine. The subjects were all over twenty years of age. Some of the glands were as large as hen's eggs, and it was very likely that dropsy had been present in earlier life. Dr. Day's patient was strumous, and some enlarged abdominal glands might have compressed the portal vein. So also Dr. Yeo's case might have been due to an enlarged gland exerting pressure on a vein. He was under the impression (gained he thought from Dr. Wilks) that inflamed serous membranes never produced serous effusions, but always lymph or pus.—Dr. BARLOW could not accept the view that the dropsy was the result of cachexia; and thought it better to acknowledge one's ignorance where one was unable to assign a cause for conditions which could only be cleared up on post-mortem examination. He himself had seen a case similar to one recorded by Dr. Murchison, in which, on the subsidence of the effusion, the enlarged glands could be felt. He recalled also a case of ascites from hepatic disease in a child, to whom he gave copaiba in doses of ten grains per diem, with very good result; as the fluid disappeared, the spleen was felt to be greatly enlarged. Better results were obtained by giving the copaiba before having recourse to paracentesis. He had also seen many cases in which the view of chronic peritonitis seemed to be the only tenable one. In such cases he had found the peritoneum studded with small tubercles.—Dr. DAY said that in another case he should certainly administer the copaiba first. He did not think the good effects of the copaiba were due to increased action of the kidneys. The child's general nutrition improved under the treatment.

Dr. SOUTHEY read notes of a case of Idiopathic Tetanus treated by Bromide of Potassium. The patient, a lad ten years of age, was admitted into St. Bartholomew's Hospital on Oct. 18th, having had symptoms of tetanus for eight days. There was a red miliary rash on the chest and abdomen. The spasms recurred at intervals of three minutes, commencing in the masseters, then involving the muscles of the neck and spine, and lastly those of the limbs. Each fit lasted from fifteen to twenty seconds. In the intervals there was persistent rigidity of the jaw and neck. There was no sickness. The urine was passed in fair amount. The onset of the attack dated from a fright received on Oct. 8th, and on the 10th he had first pain and stiffness in the abdominal and cervical muscles. He was said not to have slept for eight days. He was placed in a ward by himself and put on a diet of milk and eggs, and prescribed ten grains of chloral and twenty grains of bromide of potassium. The next day the chloral was discontinued, and the bromide given in drachm doses every three hours. He had also a warm bath on this day, and for several hours was free from fits. On their recurrence the warm bath was repeated, and on the 20th the bromide was increased to one drachm every hour and a half. These large doses of bromide were continued with the best results for eight days, their administration being prolonged for some time after all attacks of spasm had ceased. The patient, who emaciated extremely, steadily recovered. Dr. Southey mentioned that this was the second case he had brought before the Society of successful treatment of idiopathic tetanus by bromide of potassium, when administered in sufficiently large doses. The quantity of urea passed by this patient, during the continuance of the tetanus, was observed by Mr. Pye, and was appended to the case. The largest quantity per diem amounted to 16 grammes, the smallest to 10·4 grammes; mean average 12·72 grammes. During convalescence, the largest amount observed was 18 grammes, the smallest 10·66; mean average of four days 13·54 grammes.—In reply to Dr. Yeo, Dr. Southey added that the patient showed no signs of bromism.

Dr. SOUTHEY also read notes of a case of Parenchymatous Nephritis, in which the anasarca was combated by drainage tubes. The capillary drainage tubes and tiny silver cannula employed by him in the treatment of the general dropsy were exhibited by him. The cannulas were scarcely larger than the ordinary subcutaneous injecting-needles, and were introduced by a fine trocar. They terminated with a little bulbous extremity, over which the capillary india-rubber tube was drawn after its introduction into dropsical limbs. A tiny thread and small piece of adhesive plaster sufficed to maintain the cannula in the skin, and the connected drainage-tube was conducted below the patient and into a pan beneath the bed. The large amount of serous fluid which might thus be withdrawn in dropsical subjects from a single prick in each leg was quite surprising. The fluid continued to drop away for as many hours as the tube was retained *in situ*, and without any discomfort to the patient. No escape of fluid took place beside the cannula. The whole was conducted outside the bed, and several pints usually thus drained away from highly dropsical subjects each twenty-four hours. The recommendations were manifold of this exceedingly simple and cleanly method of relieving anasarca when this was extreme. 1. Instead of several needle-pricks, all of which were painful and likely to form troublesome sores and centres for erysipelas to depart from, one, or at most two—only one for each limb—were needed. 2. The skin round about the puncture was not macerated by the oozing serum, nor irritated by it. 3. The patient was kept dry and warm and clean in bed. 4. The relief obtained was more speedy as well as more thorough. 5. Should the escape of fluid prove too rapid and become attended by circulatory disturbance in the dropsical limbs, or by urmmic symptoms, the quantity drawn off could be easily regulated, controlled, or temporarily arrested, by a tiny clamp placed upon the tube. 6. The serous fluid, which in cases of renal anasarca contained very large amounts of urea, could be tested for this, and the quantity thus escaping be exactly ascertained. Thus, in the particular case brought forward by Dr. Southey, the average amount of urea which was thus excreted amounted to 4·7 grammes, or 72·56 grains for twenty-four hours. In point of fact, Dr. Southey had drawn off as much as fourteen pints of serous dropsical fluid in twenty hours from a patient by two such tubes; and, in answer to questions put to him, he was able to state that he had seen no inconvenience arise from the maintenance of the cannula in the skin in the same situation for forty-eight hours; the prick-hole closed at once and without ulcerating when it was withdrawn; and it was his belief that this mode of treating extreme and unyielding anasarca, from whatever cause arising, would come to be very widely adopted. The whole apparatus was as simple as it was easy of application, and entirely efficacious.—In reply to Mr. Howse, Dr. SOUTHEY said that the calf of the leg was the best place for the puncture; and the cannula, which was provided with a bulbous extremity, remained in place in the cellular tissue. The instrument had been made for him by Mr. Ferguson.

The Society then adjourned.

Reviews and Notices of Books.

On Alcoholism: the various Forms of Alcoholic Delirium, and their Treatment. By Dr. V. MAGNAN. Translated by W. S. GREENFIELD, M.D., M.R.C.P. London: H. K. Lewis. 1876.

THE effects of alcohol in causing derangements of cerebral function is the subject of M. Magnan's treatise, in translating which Dr. Greenfield has done good and timely service to the English reader. The subject is one of great importance.

The immediate effects of alcohol have a high physiological and social, but a subordinate medical, interest. The more lasting disorders which result from habitual excess are attracting more and more attention. M. Magnan has had remarkable facilities for the study of the psychical and nervous phenomena which result from chronic and acute alcoholism. As director of an asylum to which all cases of mental disorder which come under police notice are sent for a time before being consigned to permanent institutions, he has been able to follow out the history of the same cases during many years. The present work embodies the results of that experience in response to a question set by the Academy of Medicine on the forms of alcoholic delirium. The portion of the work of most value consists of a series of elaborate clinical studies of individual cases.

M. Magnan is well known to have devoted much attention to the action of absinthe, and in the early part of the work the remarkable effects of that agent are considered at length. The phenomena of drunkenness have been studied in both man and the dog, and a parallel between the effects is full of interest in the case of both alcohol and absinthe. Alcoholic delirium—the acute disorder to which, in England, the common term of "delirium tremens" is applied—M. Magnan would separate into two classes, according as there is or is not elevation of temperature. The pyrexial forms are always accompanied with the symptoms and post-mortem evidence of severe irritation of the nerve-centres; but these Sir Thomas Watson long ago described as mixed forms of delirium tremens and encepalitis, and the post-mortem appearances which M. Magnan has found go far to justify the correctness of the description. We doubt the wisdom of restricting the term "delirium tremens" to these severe febrile cases, the symptomatic designation being, indeed, more applicable to the cases of the apyrexial affection. The account of the latter is especially valuable for its description of the cases which do not end in early recovery, but which pass on into chronic mental derangement. These cases would appear, from M. Magnan's account, to be more frequent in Paris than they are generally thought to be in this country, but it must be remembered that his opportunities for their observation are unusually great.

The method of treating alcoholic delirium by sedatives commonly inculcated in this country does not appear to form part of M. Magnan's system. He insists on the tendency of simple alcoholic delirium to speedy recovery, and appears to think that sedatives have not much influence in hastening this. The elimination of the poison, the maintenance and restoration of strength, are the three points to be chiefly aimed at. For the restraint of the patient an ingenious garment has been designed, and is in use at the Asylum of St. Anne, as a permanent substitute for the strait-waistcoat. It can be worn through the day and night; trousers and coat are in one piece, and it is provided with pockets at the hips, into which, when necessary, the patient's hands may be secured. The great advantage claimed for it is the free state of the respiration, which is often so much impeded by the means of restraint commonly employed. The author has not much reassuring evidence on the value of confinement in the treatment of the habitual drunkard. He can only mention two cases in which a permanent cure was effected. It appears, however, that the period during which, in France, the drunkard can be confined is not sufficiently long to render the evidence of much value.

The last chapter, what is practically the second half of the work, is occupied by an account of chronic alcoholism, the course of which is detailed with much care. An outline of the tissue degeneration is followed by an account of the cases, according to their tendencies—some to dementia, others to general paralysis. Several interesting cases of hemianæsthesia are detailed, very carefully observed. The pathology of the affection is discussed in the light of recent researches on the function of the brain. The most important practical point in treatment which M. Magnan infers from his observations is the constant care which is necessary, since the subjects of chronic alcoholism are unable to resist influences which healthy persons can bear with impunity.

The last section of the work discusses the combinations of chronic alcoholism with other forms of mental derangement—dipsomania, general paralysis, &c. By the former term is designated the condition usually in this country termed "oinomania," the term dipsomania having come to be used to signify the demoralised mental state induced by chronic alcoholism. Such a use of the term is deprecated by Dr. Greenfield in the preface, but the condition is one for which some special designation is needed, and "dipsomania," if not very good, is perhaps the best. The last subject discussed is the manner in which alcoholic delirium is developed by intercurrent diseases.

Dr. Greenfield's translation is lucid, faithful, and in every respect satisfactory. The work is well printed.

Text-book of Structural and Physiological Botany. By OTTO W. THOMÉ. Translated and Edited by ALFRED W. BENNETT, M.A., B.Sc. London: Longmans, Green, and Co. 1877.

THE series of "Text-books of Science" now being issued by Messrs. Longman is fortunate in being furnished with the present volume upon physiological botany. The subject is treated with great clearness and simplicity, and yet on a strictly scientific method. Commencing with a chapter on the cell as an individual, and another on the cell as a member of a group of similar cells (a somewhat involved definition of "tissue"), the student is led to consider the formation of the plant out of cells, and then the external form of plants. The fifth chapter deals with the life of the plant, and is the most interesting in the book. We have here presented in an admirable manner the details, as at present known, of vegetable physiology, and also, we may add, pathology, for the chapter concludes with a description of the various diseases, in the form of rust, mould, and the like, to which plants are subject. Upon the subject of special morphology and classification there is little to be said, the account of the cryptogamia being very complete; but this portion of the book is not intended to be exhaustive. Palæo-phytology, or the changes which have taken place in the vegetation of the globe in the course of geological periods, forms the penultimate chapter, and anyone who desires to read a brief account of the plants of the coal measures should peruse this. The last chapter, entitled Botanical Geography, is, the editor tells us, an abridgment of Griesbach's notable work. A summary of the twenty-four regions of vegetation given by that writer is sketched, and a well-executed map, forming the frontispiece to the volume, is a valuable aid to the reader of this branch of the subject.

The book is most profusely illustrated with woodcuts, and a glossarial index is appended. Mr. Bennett has done his part well, both as translator and editor, and he deserves the thanks of intending candidates in preliminary science examinations for introducing a work which we venture to think will be almost indispensable to them. The anatomical and physiological side of botanical science has hitherto scarcely received sufficient recognition, but there is now on all sides evidence that this is being considered the chief matter in botanical teaching, to which morphology and classification are subsidiary.

OUR LIBRARY TABLE.

Remarks on Vaccination. By W. H. HINGSTON, M.D., D.C.L., L.R.C.S. Edinburgh, &c.—Dr. Hingston is the Mayor of Montreal and the Chairman of the Board of Health of that city; and the pamphlet under notice is an address which he delivered to his fellow citizens last October. The occasion of its delivery is much to be lamented. An unusual prevalence of small-pox had been met by the local authority in a very praiseworthy manner by the establishment of isolation hospitals, and by special efforts to secure the thorough vaccination and revaccination of the inhabitants of the place. It does not appear that any popular objection was raised to the former provisions for the security of all classes, but some busybodies, whose inclination to mischief was only to be matched by their ignorance, took advantage of the opportunity to stir up, so far as they were able to do so, a popular clamour against vaccination in the abstract. We have seen folly and wickedness walking similarly hand in hand, on like occasions, nearer home. Dr. Hingston's address is a dignified protest against a barefaced attempt to foist upon the unlearned such falsehoods and false inferences in discredit of vaccination as have been exposed in this country over and over again, and at the same time a calm and straightforward exposition of the value of the great prophylactic, while demonstrating the innocuousness of the operation when performed with due care and fitting precautions. What those precautions should be, is pointed out by the Instructions to Vaccinators issued by the Montreal Board of Health, a copy of which is prefixed to the pamphlet. The address contains some statistics of small-pox mortality among the vaccinated and unvaccinated respectively in Quebec and Montreal, which will be read with interest here, as confirmatory of the experience of Marson and others who have investigated the subject at home. We are at a loss to see how Dr. Hingston's arguments are to be withstood.

The Journal of Mental Science. London: Churchills. April, 1877.—The current number of this journal is hardly up to the average. The first of the "original" articles is a translation of an uninstructive article from the *Revue Philosophique*, by M. Taine, on "Cerebral Vibrations and Thought." The Rev. H. Hawkins, chaplain of Colney Hatch Asylum, contributes some suggestions on the work possible for lay visitors in asylums. "The Pathology of Mind in the Lower Animals," by Dr. Lauder Lindsay, is, perhaps, best described as a "fortuitous concourse" of assertions as to the occurrence of mental diseases in animals, which adds nothing to current knowledge, except the facts that "cholera, hydrophobia, and tetanus owe their origin and fatality simply to *imagination*," and that the very natural excitement of beetles when breathed upon is a form of insanity! Dr. Maudsley attempts to show that the alleged increase of insanity is an erroneous interpretation of the increase in the number of registered lunatics; and his figures, if insufficient for the object, prove that wider registration, due to several causes, has determined at least a part of the apparent increase. The comparative mortality of different classes of patients in asylums is the subject of a valuable paper by Dr. T. A. Chapman, and two cases of homicide in asylums are described by Dr. Yellowlees. Clinical notes are contributed by Drs. Mackenzie, McDowell, and Newington. Among "Occasional Notes" is a sneer at Sir James Paget's oration and its eulogisers, and among the notices of books, a religious work is reviewed in a spirit of hostility, and in a coarseness and offensiveness of tone which we never remember to have before seen disfiguring the pages of a medical periodical.

Virchow's Archiv für Pathologische Anatomie. Vol. 69. Parts 3 and 4. March, 1877.—The most important articles in the current number of Virchow's *Archiv* are—a description of a series of experiments on Septic and Micrococcal Infection, by von Puky; some chemical annotations by Dr. Immanuel Munk on the Determination of Sulphocyanogen in the Saliva and of Ammonia in the Urine; a paper on a case of Melanæmia, by Grüber; some histological observations on the process of Pustulation by Dr. P. Unna, and on Ichthyosis and Epithelial Growth by Dr. J. Escff; some observations on the Secretion of Urine in Jaundice, by Dr. Julius Jacobs; a series of experiments on animals in order to observe the effects of Concussion of the Brain, by Dr. Wilkowski; and an account of some investigations into the Œdema and Flow of Lymph which attend Inflammation, by Dr. O. Lassar.

PRIVY COUNCIL HEALTH REPORTS.*

THESE reports, just issued, belong to the last year in which Mr. Simon held office as Medical Officer of the Privy Council. It was then a fitting and courteous act to invite him to supervise their publication, and we have once more the pleasure of reading his terse and able exposition of the subject-matter of the volume in a summary such as he has been wont to give of the preceding scientific reports. Whilst reserving fuller comment upon particular sections, it will be of interest to glance through the summary here presented as sufficiently indicating the extent and nature of the papers that follow.

The first paper is a report by Dr. Sanderson upon a "Further Investigation of the Properties of a Septic Ferment." Continuing his experiments as to the particulate nature of septic ferments, and dealing in the present report with the common ferment of putrid infusions, Dr. Sanderson shows that on subjecting infusions containing the ferment to filtration through porcelain under high pressure, the filtrate no longer possesses the power of undergoing any further zymotic change, the filter retaining the particulate or solid portions of the infusions, and therefore any microphytic organisms contained in them. The result of such experiments is, as Mr. Simon shows, of an important negative bearing. It confirms previous observations as to the morbific ferments being essentially particulate, and that they probably have their essence, or part of their essence, in organic forms. But at the same time, before a positive conclusion can be arrived at, it must be shown that the process of filtration itself has no effect in changing the nature of the liquid passing through the filter. We regret to learn from Mr. Simon that Dr. Sanderson found himself unable to undertake any further investigations in the following year.

Dr. Sanderson's paper is followed by a brief note of Dr. Klein's on the Mycelium described in his paper on Small-pox in Sheep. The fallacies pointed out by Dr. Creighton

* Reports of the Medical Officer of the Privy Council and Local Government Board. New Series, No. 8. Report to the Lords of the Council on Scientific Investigations, made under their direction, in aid of Pathology and Medicine.

in that paper—arising from appearances due to the action of reagents upon the tissues being mistaken for higher fungic growths—have become historical. Dr. Klein repeats Dr. Creighton's corrections, and admits their validity as regards sheep-pox; and Mr. Simon thinks that probably a similar explanation might be given for the growths of like nature described by Dr. Klein in the intestine of enteric fever patients. But the fact of a luxuriant development of micrococci in these diseases is maintained by Dr. Klein and by Dr. Sanderson; and, adds Mr. Simon, "as it will, I think, clearly be convenient that Dr. Klein should at the earliest opportunity re-write, under the present correction, his account of the morbid anatomy of the two diseases, I would suggest that, in preparing to do this, he should re-examine, so far as any doubt can be raised, the whole ground of the former investigation." At the same time he admits that not only Dr. Klein, but other skilled animal histologists and botanists also, were misled by the curious fallacious microscopical forms described in his former reports.

Then follow two papers by Dr. Klein, the one on the Minute Anatomy of Scarlatina, and the other on the Nature of (so-called) Pig-Typhoid. To these we need not now specially refer, as only a few days ago the members of the Pathological Society had the advantage of hearing from Dr. Klein himself the conclusions arrived at in these investigations, and at the same time the opportunity of seeing the specimens upon which his reports are based. The reports, however, give the subjects in far fuller detail, and are deserving of careful study. That on scarlet fever is illustrated by numerous histological drawings.

The fifth report in the volume is by Dr. Creighton. It is in continuation of his former research upon the developmental history of cancer, the present paper dealing with the Infectiveness of Cancerous Tumours, with especial reference to infected Lymphatic Glands. Pursuing the view that the development of secondary tumours is of the nature of a zymotic process, and not simply that of a transplantation or migration of the elements of the primary tumour, Dr. Creighton finds, in cases where the lymphatic glands are secondarily affected by cancer to but a small extent, no evidence of migrant cells multiplying in the gland tissue. On the contrary, they seem themselves to undergo disintegration, whilst at the same time impressing on the elements of the lymphatic gland itself properties by which these latter assume the form of the cells of the primary tumour; and he describes some cases in which the infected glands give no evidence of "having received shaped migration from the primary disease, but in which, moreover, the signs of its incipient secondary infection were diffused in it so generally and so equably as also to exclude the thought of mere transplantation."

The volume concludes with a further report on the Chemical Constitution of the Brain by Dr. Thudichum, a research the magnitude and complexity of which are considerable. Much yet remains to be done before Dr. Thudichum will be enabled to draw definite conclusions from the large number of facts he is so patiently amassing.

In concluding his report Mr. Simon says that among other subjects which he had proposed to submit to systematic investigation was rheumatic fever, and the study of the natural ferments of the living animal body, the latter being especially demanded as tending to elucidate the problems of zymotic pathology. He then continues:—

"Though now myself removed from further active participation in the medical service of the State, I must continue to feel warm interest in whatever shall promote the progress of that service; and your lordships, graciously crediting me with this, were so good as to inform me, on leaving office, that Government intends to continue these investigations. The connexion of them with your lordships' Medical Department was always felt by me, while in office, as an invaluable aid, co-operative and consultative, in directions where my own working-power (under prior claim of other engagements) necessarily fell short of my wishes; and I daresay that, by my successors under the Local Government Board, the privilege of the official association with scientific research will be appreciated as highly as it was by me. As for the general value and promise of that kind of work in its bearing on the progress of medicine, I entertain the strongest conviction that, in regard of all antagonism to disease, whether with preventive or with curative measures, and whether by official or by private hands, medicine's best prospects of increased success are inseparable from such studies of exact science, and that in proportion as the pathological insight becomes more clear the growth of practical power will certainly follow. The investigations which have been made under your lordships' direction have, I need hardly say, only pretended to deal with selected portions of the vast subject-matter of pathology. Their distinctive aim (as explained in a former report) has been to supplement, in particular matters and methods of research, other and ordinary agencies of medico-scientific progress: in directions, namely, where research, if it is to succeed, requires systematic and continuous labour extending over long periods of time—labour not only inconducive to immediate pecuniary profit, but perhaps involving much cost; and where, such being the conditions, it can hardly be expected that the study, however great its eventual importance, will be adequately cultivated by private investigators. That the investigations instituted by your lordships on that limited basis have, even in these few years, been of very real instructiveness to the medical profession in this country, and that, besides such direct gain of knowledge as they have given, they have very greatly stimulated the general spirit of pathological investigation among us, will not, I believe, be questioned by any one who knows the medico-scientific records of the time; and in view of their intended continuance I would express to your lordships, though now but as an individual practitioner, my thankfulness for the aid which Government will thus be giving to the culture of the profession to which I belong."

We can but echo the opinions thus ably expressed by one so well fitted to hold the office which he adorned for so many years, and we may venture to hope that these reports will continue to be in the future of as high a character and as much to the credit of English pathology as they have been during the years in which they were issued under Mr. Simon's superintendence.

THE SMALL-POX EPIDEMIC.

THE Registrar-General's Quarterly Return, just issued, shows that up to the end of March the epidemic prevalence of small-pox was almost entirely confined to London, Manchester and Salford, Liverpool, and Birkenhead. During April the fatality in Liverpool, Manchester, and Salford showed a decided decline, and in London the deaths referred to the disease during the four weeks ending the 28th April were 295, or 69 less than in the four preceding weeks.

The fatal cases of small-pox registered in London during the last week of April were 89, against 60 and 68 in the two preceding weeks, and exceeded the number returned in any week since the middle of March.

The six Metropolitan Asylum Hospitals devoted to small-pox contained 824 patients on the 28th of April, showing a further decline from the number in the four preceding weeks, which had steadily decreased from 988 to 881.

In the outer ring of suburban parishes only 3 deaths from small-pox were registered last week. In the nineteen large provincial towns furnishing weekly returns, 8 fatal cases were recorded, against 16 and 13 in the two previous weeks; 6 occurred in Liverpool, 1 in Salford, 1 in Oldham, and not one in any of the sixteen other towns.

THE LANCET.

LONDON: SATURDAY, MAY 5, 1877.

THE approaching meeting of the General Medical Council promises to be one of unusual interest and importance, if we may judge from the number and character of the subjects that are to engage the attention of the Council. By far the most important of these subjects is that of medical education as tested by the results of professional examinations for degrees, diplomas, and licences granted in 1875 by the various bodies in Schedule A. For years past we have directed attention to the results of these examinations—viz., the rejection of a large proportion of those who present themselves in England, Ireland, and Scotland. The rejections are largest in the case of the first examinations. For example, the College of Surgeons of England, in the first examination in 1875, rejected 256 candidates and passed 511. In Scotland, the Faculty of Physicians of Glasgow rejected 34 and passed 35; in the combined examination of the Edinburgh Colleges for the double diploma, 45 were rejected and 50 were passed. In Ireland, the Royal College of Surgeons, at the first examination, rejected 62 candidates and passed 119; the Queen's University rejected 60 and passed 77. Even at the final examinations the rejections are large. Thus, at the Royal College of Surgeons of England, 129 were rejected, while 369 passed. In Scotland, the College of Physicians rejected 60 and passed 98; the Faculty of Physicians and Surgeons passed 14 and rejected 21; the two Edinburgh Colleges rejected 40 and passed 71. In Ireland, the College of Surgeons rejected 37 and passed 122; and the Queen's University, at its second and third examinations, rejected 82 candidates and passed 117. These examinations may be taken as representative, and they show in a painful way that the professional education of students in this country is so ineffective as to result in the rejection of a large proportion of them at the ordinary examinations. This proportion is increasing, probably, rather than diminishing. It has been large for years—it has been known to be large,—but the subject is difficult, delicate, and complicated, and for nearly twenty years it has been avoided or very slightly regarded by the Council. But it can scarcely be evaded any longer. The Council is, *par excellence*, the Council of Medical Education. Its chief duty is to take cognisance of the exact state of medical education in the kingdom, to say where it fails, and to see that the failures in it are reduced to a minimum. Not only is the Council committed to a grave consideration of this subject by a regard for its own reputation, but by a specific recommendation of a committee appointed for the purpose at the last meeting of the Council, which recommended that the explanations of the licensing bodies be taken by the Executive Committee as to the large number of rejections, and that the Executive Committee should report on the subject to the meeting now about to be held. It will of course be quite easy for the Council to avoid a difficult and awkward discussion on the state of medical education. There are many other subjects to be brought under its notice which are more exciting and more easy. The international recognition of degrees, the anti-vivisection agitation, the Conjoint Scheme, are a few of the questions upon which the Council may plausibly occupy its whole time, and then decide that there is none left to discuss the subject for the discussion of which it was mainly called into existence. There is yet another matter to the consideration of which the Council is committed—namely, the Reports of the Committees on the Visitation of Examinations. The Council last year resolved that these Reports of 1875 and 1876 respectively be discussed on the first day of the session of 1877. There is much in these Reports to assist the Council in considering the results of examinations. The nature of the examinations and their results clearly must be more or less considered together, and both lead to the great question of the educational processes by which students are prepared for the examining boards—as we have seen so indifferently prepared. We cannot speak of this subject without reverting to the loss which the Council sustained in the death of Dr. PARKES, who had given it so much thought, and seemed able to view it apart from all traditional customs and interests. There is a danger that the Council, having asked information and opinions from the licensing bodies on the results of their professional examinations, will content itself with recording these, and adding a few vague generalisations of its own. But this will not dispose of the scandal, and will not sustain the reputation of the Council as the Council of Medical Education. Without intending flattery, we will say further that this conclusion will not be worthy of the Council, which certainly never contained more men than it does at this moment eminently capable of exposing the faults and flaws of present methods of medical teaching, if they can be brought to view them in a critical and independent spirit. The ancient universities of the three divisions of the kingdom, the colleges and corporations, the modern provincial schools, are all ably and amply represented. It will be easy to refer the large number of rejections to defective preliminary education, and to the idleness of students. But these explanations alone will not suffice. It would be vain to maintain that we have arrived at satisfactory methods of teaching, and the duty of pointing out how these methods are to be improved now devolves on the Council of Medical Education.

PROF. STANLEY JEVONS undertakes, in the April number of *Mind*, to defend the examination system as at present in vogue, and also the process known as "cramming," to which the examination candidate resorts, as being methods of education of the highest possible value. He has no sympathy with the popular cry against examinations, and believes that the training they compel the student to go through, although it may be narrow, yet it is not superficial, and is the best possible training the mind can have. It is somewhat cheering to find such hearty optimism in these days, when men look upon so many of the institutions of society as "necessary evils," and many, we hope, will carefully read the arguments upon which Mr. JEVONS bases a defence of that which at first sight appears indefensible.

It must needs be that a system of examination should be established to test knowledge and to winnow the chaff from the grain, but is it also indispensable that the examination should be so framed as to force the student to resort to a method of preparation which leaves him but little scope for the exercise of his intellectual powers? We recently took occasion to point out the dangers accruing from the tendency towards universality into which our examinations have fallen, the impossibility of candidates being enabled to master all the subjects required of them, and the necessary degradation of intellect that must follow in the attempt to gain that mastery. Prof. JEVONS, however, thinks otherwise; he preaches the gospel of "cram," and not only is loud in its praise, but declares there is no better way of intellectual training than this. He separates, it is true, that system which he styles "bad cram" from "good cram," the former being that to which the term is most usually applied—the artificial system by which the learner endeavours to make up for defective mental capacity by storing his memory with a chain of facts linked together by the insecure rivets of a system of artificial "mnemonics." It may be said that the system with which Prof. JEVONS is enamoured is none other than that pursued more or less by every well-regulated student, who feels that his credit is at stake in preparing to pass an examination. The preparation for an examination involves the foreknowledge of the limits of the latter, and the wise candidate does not stray beyond these limits. He supposes—whether rightly or wrongly concerns him not—that the examining body know better than he does what he should take and what reject, and he seeks for instruction where it can be best provided within the lines laid down. The readiest way to pass creditably is, according to Mr. JEVONS, to seek the guidance of a teacher who knows precisely what are the limits of the examination, what the relative value of its constituent parts, and who by judicious iterations and frequent exercises manages to fill his pupil with the requisite amount of knowledge, and no more, that will be required of him to go through the ordeal with credit and satisfaction.

This, then, is the process of true "cram"; and, with all due deference, we submit that it is at the best lamentably insufficient as a means of education, and in many cases even for the purpose for which it is designed—that, namely, of passing the required test. The writer of the article in *Mind*, however, not only avers his belief that education founded upon the examination system is good, but states that the cramming process is a very valuable educational power. He dismisses as chimerical and absurd the popular notions that education should have an utilitarian basis; that the knowledge sought for in the examination-room is not the knowledge that fits a man for his duties in life; and that it is wrong to mix up in one's mind the process of examination with the true system of education. He points out, rightly enough, that education is synonymous with training, and that it is as absurd to require a man to retain all the steps of his education through life as it would be to require the gymnast to be constantly reproducing his earliest efforts of physical skill. The object of education is rather to train the mind how to employ itself most profitably; but the mere faculty of memory, the readiness with which early knowledge may be reproduced, is of very small account in the affairs of life. It is not, then, he says, to be deplored that the subjects in which a candidate is examined should be so various and so vast that his preparation for the examination is the only occasion on which he takes them up; and that, once the object he had in view is attained, he should straightway go his way and forget all about them. The mental exercise he has endured is all for good, although the impressions conveyed upon him have been so fleeting and imperfect.

Granting the truth of these propositions, in so far as they apply to the examination system as a test of general culture, exception cannot be too strongly taken to their application to systems of professional education. Nothing can be more fallacious than to confound the training of the intellect with the test of real knowledge, and we trust that the diploma-conferring bodies in our midst will not be seduced by siren strains such as these from the reforms in the conduct, methods, and aims of their examinations which are so sadly needed. Just in proportion as they conform to the type that Prof. JEVONS holds up to admiration—the class of examination, namely, which can only be passed by severe and prolonged application to the "cramming" process,—they are ill-adapted to their purpose, and productive of much harm. How few, indeed, if any there be, of the examining bodies do discourage "cram." They rather foster its development, and allow candidates to pass who are never called upon to show that they have any clear comprehension of the subjects upon which they are examined, but who satisfy the examiners by reproducing *verbatim* statements of facts as they appear in the pages of their text-books. Before an examination system can be anything like perfect or thorough, a vast amount of the traditional routine of examinations must be swept away, and means devised whereby the candidate may not be forced to rely solely upon a well-crammed memory. To put the matter from the point of view of the candidate rather than the examiner, it may safely be asserted that no amount of cram, however "good," or however ably handled, will develop the examinee into the good practical physician or surgeon. It is not here a question of mere knowledge of facts so much as evidence that there is a thorough comprehension of them in all their bearings. It is herein that the great value of practical instruction lies, especially that in which the student is enabled to confirm for himself and by his own observation the statements of his teachers and his books. Take anatomy for example. Every student knows, or too late perhaps comes to know, that it "pays" to work diligently in the "dissecting-room." From his point of view it is of value because he has learnt that knowledge so obtained is more easily stored up, and is reproduced more readily when the examination day arrives. However much he may forget of the subject, and however rapidly, after the examination has passed by, still there is no knowledge more easily recalled upon slight reapplication than that which is gained by means of hand and eye, as well as ear. It is in this subject (anatomy), too, that the evils of cramming are best illustrated, and it must be confessed that the "bad" sort of cram is wofully prevalent among medical students. Whether bad or good, the learning of anatomy by "cram" is the one way to learn it badly; and if, by a lucky chance,

due to defects in the working of the examination, the student thus prepared manages to pass, he can do so with but slight sense of satisfaction, and his want of knowledge is not long in making itself manifest to him. It is the same with other branches of medical learning; so that whilst admitting a well-planned examination to be the best educational test that can be devised, and to be itself a valuable part of educational training, it must be doubted whether Prof. JEVONS is equally right in claiming like praise for a method of examination which requires the full employment of the process known as "cram" to enable the student to pass it creditably.

THE object of the Universities Bill, on which the House of Commons went into Committee last Thursday, is to give power under certain restrictions for the application of College revenues to University purposes; in other words to make use of the surplus funds of the Colleges for the improvement of professorial teaching in the University. These surplus funds, should the Bill come into operation, would be provided without doubt by a considerable reduction of the non-resident Fellowships, as to number, duration of tenure, and actual value. At the present time more than half the net revenue of the Colleges is spent away from the Universities by men who give nothing in return for the incomes they receive. And, although Mr. LOWE is right in saying that these non-resident Fellowships raise the standard of acquirement by encouraging men to compete for prizes which enable them to win distinction and give them their start in life, still it is not difficult to see that the system is open to great abuse. A young man elected to a non-resident Fellowship receives about £200 a year for a period of, say, ten years; no obligations are attached to the tenure, save, in most cases, celibacy. He may work or not, just as he pleases; if he works, he probably does so for his own advancement in the profession he has selected. In many cases, however, little work is done. The present prize has been gained after years of toil and self-denial; £200 a year is a sufficient income; and ten years a long period to look forward to. The man does not intend to be idle, but the spur of necessity is taken away, and he drifts on without settling down to any definite pursuit, till at last he is content to accept a position far below his original promise. Reduce the value of non-resident Fellowships to £100 per annum, and limit the tenure to five years, and we believe more practical good will accrue than under the present system.

In the discussion the other night, the relative merits of the professorial and tutorial system were entered into, and the advantages to be gained by the endowment of research. Were it the intention of the present Bill to take the teaching responsibility away from the Colleges and give it to the Universities, we should join issue with Lord G. HERVEY in his expression that it is undesirable largely to increase the professoriate or to establish offices in the University unconnected with tuition at the expense of the Colleges. But this is not to be the case, since, as Mr. GATHORNE HARDY pointed out, before a farthing can be taken from the Colleges, thorough provision is to be made for their wants. The tutorial work, therefore, of the Colleges is not to be interfered with. With regard to the respective merits of professorial and tutorial teaching, we respectfully submit that neither can do without the other, and the best results are attainable by a judicious admixture of the two. Professorial teaching gives a wider range, tutorial greater accuracy. As to the arguments brought forward by Mr. TREVELYAN against the "endowment of research," they fail, we submit, to prove anything. Science is not cultivated under the same conditions as literature. Mr. GROTE, the banker in Lombard-street, might write the "History of Greece," and Mr. GIBBON, as an official at the Board of Trade, might write the "History of Rome," but the time either could snatch for continued hours of unbroken work—such as is required, for instance, in the case of elaborate analyses—would be too little to be rewarded with great scientific results. Mr. TREVELYAN instances HARVEY, JENNER, and HUNTER as examples of what has been done without endowment in times past; yet HUNTER always regretted the time wasted in earning his daily bread. When called away from his scientific pursuits by a patient, he frequently exclaimed, "Well, I suppose I must go and earn this guinea, or else I shall be sure to want it before night." Had a richly-endowed chair of physiology existed in those days, HUNTER no doubt would have gladly abandoned his consultation-room and entirely devoted himself to science. But it is not altogether the great names in science that are to be regarded; science advances by the accumulation and verification of facts, and to this field, in order to secure a steady advance, ought to be attracted honest, though humble, labourers. To do so, however, a means of livelihood must be offered, and this can only be done at present by grants from Government, the learned Societies, and the Universities. If success has been obtained under exceptionally difficult circumstances by a few great men, are all scientific efforts to be equally heavily handicapped? We hope not, and trust that under the present Bill liberal provision for the scientific teaching at the Universities will be made, and a just encouragement be offered to men to devote themselves entirely to scientific work, instead of making it subsidiary to other engagements.

THE current number of the *Nineteenth Century* contains an article marked by the grace of style and cogent force of reasoning which we might almost say are peculiar to the veteran physician of whose classic writings our profession is so justly proud, and to which we safely appeal when we are so often taunted with the absence of finish and the uncouthness of scientific phraseology in modern medical works. Sir THOMAS WATSON, looking on our insular position, is sanguine enough to hope that although he—now as he reminds us in his eighty-sixth year—may not see the abolition of zymotic diseases, yet that it will be witnessed in the next generation, or at least by his grandchildren. If such a desired result be attained, we are sure that the general public will owe a great debt of gratitude to Sir THOMAS WATSON himself for the admirable article to which we desire to draw the attention of our readers. "Prevention is better than cure" is a maxim so frequently reiterated that it would almost seem to have lost its value through familiarity, but the profession and the public have yet to learn and appreciate that "prevention is also more easy than cure." The discovery of the several producing causes of zymotic diseases

has been made with an approach to accuracy, and their arrest can therefore be carried out efficiently and certainly. We could wish that the requisites which are laid down by Sir THOMAS WATSON, and which are thoroughly efficient, were carried out by every medical man in every case of contagious disease which came under his notice, and that the public were sufficiently well-advised in their own interests to allow such measures to be undertaken, or that the State even would insist on their thorough performance "without let or hindrance." Notification to the authorities of the occurrence of every case of contagious disease, instant isolation, thorough disinfection, and an effectual quarantine, would undoubtedly free us from these plagues, to which, as Sir JAMES SIMPSON truly observed, the escape of a rattlesnake or a tiger into a school full of children is not to be compared in danger. Although the "liberty of the subject" and "the economic aspect of the question" will not bear examination, yet prejudice, backed up by these apparent reasons, will, we fear, postpone the abolition of "catching" diseases long beyond the period fixed by Sir THOMAS WATSON. The zymotic affections whose histories he has treated most in detail are small-pox, measles, and typhus fever, and their entire dependence on the importation of the contagion into a neighbourhood, notwithstanding the impossibility of tracing it in every case, is laid down with singular clearness and lucidity. As a caution against coming to a conclusion on any single instance, the case of small-pox narrated in Sir THOMAS WATSON'S lectures as having occurred *de novo* at Millbank is well worthy of remembrance, for the author now states that he received as recently as 1860 a letter which clearly proved its importation from without. We must confess, however, that we are not yet quite converted to the acceptance of Dr. WM. BUDD'S exclusive explanation of the presence of enteric fever, even although it has gained the powerful advocacy of both Professor TYNDALL and Sir THOMAS WATSON. Its non-appearance *de novo* is not so clearly established as in the case of the other zymotic affections, even when due allowance is made for the transmission of germs by water, milk, and occasionally by the air. We are strengthened in our leanings towards Dr. MURCHISON'S view of its occasionally spontaneous origin in filth by many recent well-considered reports by our medical officers of health in rural districts. Whether fæcal contamination may in a few isolated examples be the sole cause, or whether it be only the carrier and medium of multiplication of the poison, fortunately makes no difference in our efforts to destroy it and prevent its spread. We earnestly second the preventive recommendations so well urged by Sir THOMAS WATSON, and we congratulate the profession on the skill with which the most urgent requirements of modern sanitation have been placed before the intelligent section of the lay public. Our readers could not do better than suggest the reading of this article by their non-professional friends and patients if any opposition be encountered in carrying out the necessary precautionary measures whenever and wherever an epidemic occurs.

WE learn that Dr. Wm. Stokes, Crown nominee, has resigned his seat at the General Medical Council.

Annotations.

"Ne quid nimis."

MEDICAL WOMEN AND THE UNIVERSITY OF LONDON.

So serious has been the effect of the memorial of the medical graduates of the University of London, that three members of the Senate—a graduate in laws and two graduates in arts—have thought fit to issue the circular which we print below. This circular is evidently intended as a "whip" to the supporters of the medical women for the meeting of Convocation on Tuesday next, when a vote of thanks to the Senate will be proposed for their resolution to admit women to medical degrees. These three Senators have, we do not hesitate to say, acted most improperly, and though we believe their action has injured their own cause, we do not the less regret it. The tone of their circular is that of a challenge to the medical memorialists, and will certainly not tend to remove ill-feeling between the medical and certain sections of the arts graduates; it is, indeed, calculated to sow dissension such as years may not remove. We do not dispute the right of the women's party to warn their friends of a fight in Convocation, but we do seriously question the propriety of three Senators (one of whom was the proposer of the motion in the Senate on Feb. 28th) acting as party whips and descending to electioneering tactics. All members of Convocation ought clearly to understand that the question of the admission of women to degrees in medicine was not on the *agenda* of the senatorial meeting of Feb. 28th, and that the resolution then arrived at took all but a privileged few by surprise. Subsequent resolutions of the Senate are sufficient testimony to this fact. We can find no proof either of the accuracy of the statement in the circular of the three Senators that the step taken by the Senate is in the direction of a policy repeatedly sanctioned by votes of Convocation. "Repeatedly" is a word scarcely justified, and though Convocation has approved of the admission of women to degrees in medicine, this has been done in a fashion which is made ridiculous by the serious nature of the step. At a meeting of Convocation notice was given of a resolution that women should be admitted to degrees in arts, and an amendment was made and carried that women should be admitted to all degrees, in a house where medical graduates, who have never failed to show moderation in regard to questions concerning graduates in arts, were conspicuous by their absence. Is this a fair way of testing the feeling of the graduates generally, not to speak of those of the medical graduates in particular? Men who, like those of the Medical Faculty of the University of London, have made their University famous everywhere, as most of the graduates in other Faculties willingly admit, have a right, though in a numerical minority, to demand respect for their opinions on a question which they must be best able to judge. We cannot descend to discuss the notion entertained by some small-minded cliques which have brought their influence to bear on Convocation, that the admission of women to medical degrees is opposed by medical graduates from motives which have been ascribed to trades'-unionism. We must credit those medical men who have memorialised the metropolitan university with that general purity of motive which the moderate supporters of medical women do not deny to the main body of the profession. On the whole, we are glad that the question of the admission of women to medical degrees in the University of London will have a chance of being submitted to a fairer decision at the coming meeting of Convocation than has hitherto been given to it. It unfortunately happens, for a variety of reasons, that medical

graduates cannot attend the meetings of Convocation as do the graduates in other faculties. But could the two hundred and thirty medical graduates who signed the memorial to the Senate, and many others who, from various causes, had not the opportunity of signing it, though willing to do so, attend the meeting of next Tuesday, no one can doubt of the result of any vote bearing on the admission of women to degrees in the University; for not a small contingency of graduates in arts and laws would lend their support against such admission. We earnestly hope that the medical graduates will muster in force. The Senate of the University of London has, in its wisdom, recognised the importance of the memorial, and, by suspending all action till Convocation has met, has shown that it still possesses that excellence of judgment which, all parties must admit, has been one source of the prosperity of the University and of the eminence which it has attained throughout the civilised world. Let the medical graduates sacrifice their personal convenience for the public good, as they have done over and over again, and attend in such numbers as will, though on a division they be in a minority, bear witness to the strong feeling which exists amongst them against a step detrimental in every way to the interests of their University.

"30th April, 1877.

"SIR,—You are probably aware that on the 28th of February last the Senate of the University of London resolved:—'That in the opinion of the Senate the University should exercise the powers conferred by the Act 39 & 40 Vict. c. 41' (the Act empowering the University to confer medical degrees on women); and that a committee was appointed to draw up regulations for giving effect to this resolution. At the approaching meeting of Convocation on the 8th of May, a resolution thanking the Senate for its action in this matter will be proposed on the recommendation of the Annual Committee. In consequence, however, of an adverse memorial influentially signed by medical graduates, a notice of motion has been given in the Senate to rescind the resolution of the 28th of February, and it is understood that this motion is not likely to come on for discussion until after the meeting of Convocation. In these circumstances, it is obviously desirable that all graduates who approve of the step taken by the Senate in the direction of a policy repeatedly sanctioned by votes of Convocation, should attend the meeting on the 8th of May, to support the resolution recommended by the Annual Committee.

"We are, Sir, your obedient servants,

"T. SMITH OSLER, LL.B.
"R. H. HUTTON, M.A.
"J. G. FITCH, M.A."

THE WAR: ITS MEDICO-SANITARY ASPECTS.

IT would appear probable that the medico-sanitary aspects of war will be brought into greater prominence during the struggle which has now commenced than in any previous war on record, not even excepting the Franco-German war and our own later expeditions in Abyssinia and Ashantee. Debarred from indulging in special correspondences or gossiping news on military movements, the Russian press gives peculiar prominence to the medico-sanitary prospects of the campaign which has just opened as it affects their own army. But quite apart from the unrelieved attention thus given to this question by the Russians, there can be no doubt that the sanitary condition of the troops, whether in peace or in war, has of late years received an amount of attention from the Russian Government which has, perhaps, equalled that given by any other of the great military nations of Europe. And, indeed, in respect to the sanitary condition of troops in the field, it may be questioned whether any other nation, excepting only the German, has given of late such systematic attention to the subject as Russia. From time to time during the last five or six years we have had to direct the attention of our readers to the measures adopted in Russia, experimental or other, for perfecting the medico-sanitary arrangements and *matériel* of troops in campaign. We have before us an Order of the Day of His Imperial Highness the Commander-in-Chief of the Russian army now moving upon the Danube, and issued at Kischenev, just before the passage of the Pruth, and of which the greater portion is occupied by an account of an inspection of the hospitals and medical and sanitary arrangements of the army. The order is a continued series of praises of the medico-sanitary provisions for the campaign, and the excellent spirit displayed by all who form part of the medico-sanitary service. His Imperial Highness dwells especially upon an improved method of registration of the sick and wounded, so that accurate records may be kept of every man who enters upon the campaign. He refers also with special approbation to certain conferences which have been held by the medical staffs during their periods of leisure for the discussion of moot points in hygiene and surgery.

But the systematic provision for the medico-sanitary welfare of the troops in the field, although apparently developed to an exceptional pitch, is but a part only of the provision which will be made for the aid of the sick and wounded. This is to be supplemented, to an extent hardly ever before contemplated in war, by the efforts of voluntary societies formed for the purpose. Great as was the assistance given by such societies during the war in the United States and in the Franco-German war, in neither instance, we believe, was this assistance made one of the most prominent features of the opening of war. In Russia, however, the Empress herself, contemporaneously with the declaration of war, has come forward to stimulate and guide the seemingly profound enthusiasm which affects all classes in this matter; and the already exceptional growth of the "Red Cross" Societies in Russia is undergoing a further development, which, in association with the regular medico-sanitary provision for the army, must place the sick and wounded of the Russian army in a position rarely, if ever before, observed in a great war.

While all these preparations are being made to mitigate the horrors of war on the Russian side, on the Turkish side no preparation at all corresponding would appear to have been made, and, indeed, hardly to have been contemplated. Nevertheless, given a good commissariat, no troops would, perhaps, suffer less from their absence than the Turks, so admirably do the habits of the Turkish soldier accord with the exigencies of a campaign.

A HINT TO MEDICAL OFFICERS OF HEALTH.

WE have on several occasions pointed out the absolute want of uniformity that has hitherto characterised the annual reports presented by both urban and rural medical officers of health. On this account it has been impossible for us, in receiving and criticising these reports, to institute any sort of comparison as to the kind or quantity of work done in the various combined districts. It does not appear, however, to be generally known that the Local Government Board, at the end of last year, forwarded to all urban and rural sanitary authorities copies of Instructions, prepared by their medical officer, "with reference to the annual reports which are to be made by medical officers of health appointed under the Board's order of the 11th November, 1872." These "Instructions," which are signed by Dr. Seaton, indicate that, as well as containing information as to sickness and deaths, measures taken to prevent spread of disease, &c., "special attention should be had to the provisions of Article 3, which directs systematic inspections of the district to be made by the medical officer

of health, apart from the inquiries which, under other articles of the order, he has to make into particular outbreaks of disease, or into unwholesome conditions to which his attention may have been specially called by complaints or otherwise." We need not quote the text of these "Instructions" any further, because it is presumed that all health officers have received and read them, but we reproduce the last quotation because, according to our own experience, that particular "instruction" seems to have been, as a rule, almost entirely ignored. It is the exception rather than the rule for any medical officer of health to give a *résumé* of experiences gleaned in his district, or of the practical results that he has obtained. Nor, indeed, are the tabular statistics ordered by the Local Government Board always included in the health officer's annual report. Our hint to sanitary officers is, therefore, that their annual report should always include the very useful and practical table of statistics required by the Local Government Board, and should include also a summary of actual work done in the district. Many of the reports received by us seem to indicate that the medical officer of health has sat in his office from the beginning to the end of the year, and has simply collated the statistics collected by his clerks and inspectors.

THE PORT OF LONDON SANITARY WORK.

WITH another epidemic of cholera looming in the distance, the seventh half-yearly report of the medical officer of health for the port of London, Dr. Harry Leach, just published, has peculiar interest. We turn to it not only to ascertain how the current sanitary work of the port progresses, but also to obtain some insight regarding the question whether in the interval since the last epidemic of cholera, the sanitary organisation of the port, as protective of foreign epidemics, has improved. The result of our examination of the report is not wholly satisfactory, and hardly such as, after upwards of four years' tentative experience of the port sanitary duties, voluntarily assumed by the Corporation of London, we should have anticipated from the wealthiest municipality and the sanitary authority of the greatest port in the world. The report, as previous reports, shows the infinite importance of the work done by the port sanitary authority in the health interest of the metropolis; it shows also an amount of work done by the medical officer of health and his coadjutors so large and detailed as to excite no small surprise that it can have been accomplished, in the period of time to which the report refers, by four individuals—to wit, the medical officer of health (Dr. Harry Leach), the medical officer who has the duty of examining ships at Gravesend and has charge of the hospital-ship there (Dr. Whitcombe), and two inspectors. During the last six months of 1876, not less than 6282 vessels were inspected in the docks and on the river, 33 were disinfected or fumigated, 42 had various sanitary alterations effected in them at the suggestion of the medical officer of health, and not less than 122 sailors suffering from infectious disease were removed from ship-board to hospital. In addition, a special inspection was made of canal barges and the population in them, to which we shall at another time refer specially. Notwithstanding this amount of work done by so small a staff, on every page of the report almost we find indications that it does not meet fully the sanitary requirements of the port. Thus, while it has been shown by experience that it would be very desirable to visit every ship entering into the port within twenty-four hours after it had been moored, it is found impracticable with the present staff of inspectors to do this, and as a consequence cases of infectious disease and dirty forecastles may escape notice. Again, such regular inspection as it is possible to establish is disarranged by every instance in which it is necessary to disinfect or fumigate a vessel, the primarily important inspections having to be given up by one or other of the inspectors while this incidental work is being attended to. From the same insufficiency of staff it is found impracticable to insist upon the speedy removal of foul cargoes (e.g., rotten potatoes, bad preserved meats, street sweepings, foul manure, &c.), from the crowded parts of the port, to keep proper supervision over the water barges, to examine the water brought in by inward-bound vessels, and to keep in due check nuisances on the banks of the river within the port sanitary authority's jurisdiction.

In respect to foreign epidemics no doubt that special arrangements would be made were they, or any of them, imminent. But security against such epidemics being introduced along our water-ways will depend, as security against them on our land-ways, upon the completeness and efficiency of the ordinary sanitary arrangements rather than upon arrangements made to meet the exigency of the moment, and which at the best must be merely stop-gaps. We learn from this report that the Metropolitan Asylums Board Hospitals have refused to receive patients sent to them by the port sanitary authority, and that this authority is now practically reduced for hospital accommodation to its hospital ship the *Rhin*, off Gravesend. This ship, an old, rotten, inconvenient corvette, was originally lent to the Corporation for a floating cholera hospital, and can scarcely be fitted for a general hospital for infectious diseases.

All this is hardly a satisfactory state of things with reference to the sanitary administration of the Port of London, and it appears to be curiously incongruous with the usual action of the magnificent Corporation in the work it undertakes. The first city and first Corporation in the world should have, as it may if it so wills, the completest arrangements for port sanitary work, and be the unquestioned example to other port sanitary authorities, whether at home or abroad, in this matter.

THE SURGICAL TREATMENT OF EMPYEMA.

THERE are few cases which cause more anxiety to physicians than patients suffering from empyema, and we fear that uncertainty as to the best mode of treatment considerably aggravates this anxiety. Time is often wasted while half measures are being tried and found to fail; and sometimes it is only as a *dernier ressort*, when the patient's strength is exhausted and the case is desperate, that the true curative treatment is adopted. When the existence of pus within the pleural cavity has been established, there can be no doubt of the necessity for its evacuation. The question remains, how can this best be accomplished? Aspiration is the easiest method, and in children is frequently very successful; for any pus that remains after the operation is not unfrequently absorbed, and masses of lymph become organised. But in adults we do not meet with these favourable results; the hopes excited by the immediate relief following the aspiration are only too commonly dissipated by the evident signs of resecretion of pus. The fact is that the aspirator never completely empties a chest, and the fluid left behind is neither absorbed nor organised, but causes further suppuration. The other plan of making a free opening into the chest low down completely evacuates the pus, and allows of the gradual obliteration of the pleural cavity by the expanding lung, collapsing walls, and displacement of adjacent viscera; and it offers the only chance of cure in the great majority of cases of empyema in the adult. But there is a dread of this operation in the minds of many, owing to the evil results not unfrequently attending it: prolonged suppuration, destroying life by hectic, albuminoid disease, or acute tuber-

culosis; or decomposition of pus, with consequent blood-poisoning. Here it is that we think the antiseptic treatment can be employed with the happiest results; for it has been in cases of large abscesses that its most decided triumphs have been won. Where only pure non-irritating air is admitted to the pleural cavity the suppuration at once or soon ceases, and the patient escapes the danger of blood-poisoning. A drainage tube should be employed, and care should be taken that it be passed just into the pleura; but it is unnecessary that any of the tube should be free in the cavity. Several cases are on record where these tubes have slipped into the pleura, and have given rise to trouble in extraction. This accident can be quite prevented by adopting the simple expedient of transfixing the outer end of the tube with a hare-lip pin, which crosses the wound and effectually prevents the tube passing in; and if the ends of the pin be secured to the chest by strapping, it equally prevents the tube being forced out of the opening. The tube should not be withdrawn until all secretion from the pleura has ceased.

HEALTHY HOUSES.

A CASE that was reported in *The Times* of Saturday, and commented on in a leading article in the same journal on Monday, shows to a very conspicuous extent that the public as well as the profession are beginning to take an interest in the quality of the air they breathe, at home as well as abroad. The facts are briefly these:—Lady Winchelsea, some twelve months ago, hired a furnished house for three months in Wilton-crescent, and found, as soon as occupancy commenced, that unmistakably unpleasant odours pervaded the building from basement to attic. Her ladyship, taking a common sense as well as a sanitary aspect of the matter, at once determined the tenancy, and declined to pay any rent. A suit for non-payment of rent was the consequence, the cause was argued before Mr. Justice Quain in March of last year, and a jury found that in consequence of the nuisance complained of the house was not habitable. It was elicited in evidence that a cesspool close to the house, with a ten years' accumulation of filth, was in direct communication with the basement by means of a porous-brick drain, untrapped, and coated with a deposit two inches thick. The chief argument used by the plaintiff's counsel was to the effect that no implied warranty was given that the drains should be in perfect condition, and that as a matter of fact more than half the houses in the neighbourhood were more or less in a similar insanitary state. The case was re-argued on the 26th ult., and a vast number of cases were cited; including that of "Smith *v.* Marrable," in which a house was deemed uninhabitable because various active specimens of animated nature had already taken possession of the sleeping apartments. A satisfactory and final result was obtained, the Lord Chief Baron, with Barons Pollock and Huddleston, ruling that the house in Wilton-crescent was not reasonably fit for occupation.

The importance of the decision to those interested in the prevention of disease (and who of us is not?) cannot be exaggerated. We have here a practical recognition of sanitary laws, and an equally practical proof that these matters are beginning to be understood by the public as well as the profession. We are quite prepared to admit that many large houses may be, and, indeed, probably are, in a sanitary sense, very defective, but it is well that the fact, however objectionable, should obtain all possible publicity, so that others may follow the example of Lady Winchelsea. For it may be assumed as certain that until actions of this kind increase and multiply, so as to introduce a commercial aspect into the question, architects, builders, and contractors will content themselves with decorating the drawing-room, ignoring the basement arrangements, and leaving every house, when fires are lighted, to act as a big sucker wherewith to draw foul emanations from the drains beneath.

A SERIOUS OBSTETRIC AFFAIR.

THE *Dudley Herald and Wednesbury Borough News* contains an account of an inquest on the body of Mary Edwards, who died shortly after delivery. In the course of her confinement she was attended by the midwife, the parish surgeon (Dr. Ballenden), and Mr. Thomas A. Walker. The midwife sent for Dr. Ballenden, for whose services the patient had an order, in consequence of the difficulty of the case. Dr. Ballenden first sent his son. About 4 o'clock in the afternoon of Tuesday he went himself, and found an arm presenting and the os uteri rigid and undilatable—a very unpleasant case for any obstetrician. He tried to turn, but as it caused intense pain, he desisted. He gave instruction to the midwife "not to meddle with the patient, but to keep the arm up," and to send for some medicine—apparently opium and antimony. Dr. Ballenden, in his evidence, said that it was his intention to return after a few hours and see the effect of the medicine; but he heard incidentally in his own surgery that another surgeon had been sent for, and so did not go. Had he gone and found the woman sinking, he would have eviscerated, and "if that had been done, he was perfectly satisfied the woman's life would have been saved." Other witnesses said that Dr. Ballenden spoke of coming on the morrow and destroying the child, and that he said it was no use going back again that night. Be this as it may, Mr. Walker was called in at 10 o'clock, who administered chloroform and delivered the woman by turning. She recovered consciousness, but was much exhausted, and died in an hour and a half after. The facts are intrinsically interesting and serious, but the inquest was made still more so by the presence of various medical men who gave evidence. Mr. Lawson Tait, of Birmingham, and Professor Simpson, of Edinburgh, distinguished themselves by strong evidence in favour of the course pursued by Mr. Walker; and Dr. Clay, of Birmingham, equally distinguished himself by evidence in favour of the conduct of Dr. Ballenden. We should say that at the post-mortem examination, made by Mr. Pope, of Wolverhampton, assisted by Mr. John James Bunch, of the same town, there were found complete laceration of the vagina, highly congested and inflamed lungs, and the smallest heart Mr. Pope had ever seen. His view of the death was that it was caused by exhaustion consequent upon the weak, flabby state of the heart, inflammation and congestion of lungs, and the lacerations and cross-birth. In this view Dr. Clay seemed to concur, and to blame the administration of chloroform. He gave fragmentary and hearsay evidence of eight deaths in parturient women from chloroform. It should be said that Mr. Walker, who was present at the post-mortem examination, did not see the laceration, and did not admit that there was any. The jury arrived at the following verdict:—"We say that Mary Edwards died from exhaustion, consequent upon the weak state of the heart, the laceration of the peritoneum and vagina, consequent on the cross-birth and protracted labour." The jury, however, wished to append to their verdict the following:—"We consider that Dr. Ballenden's conduct is blamable in not having visited Mary Edwards a second time; he being the parish surgeon, and she being entitled to a parish note, he ought not to have been away from the case. On the report he heard he ought to have satisfied himself of its correctness before giving up the case. We do not attach blame to Mr. Walker."

On a careful consideration of the whole evidence, we can-

not seriously dissent from the conclusions of the jury. It may be too much to say that Dr. Ballenden should not have left the case. But, at any rate, it is to be regretted that he left it for more than a very short time indeed, knowing the importance of time in such cases, and of seizing the first moment of opportunity for delivery. As regards Mr. Walker's treatment of the case, we are at a loss to know what else he could have done better or more consistent with recognised principles of practice. Even if laceration happened in the act of turning, under chloroform—which is by no means certain — this was not necessarily the fault of the operator, in a case of cross-birth where hard labour had been going on for many hours. There was no evidence to show that the woman had any true pneumonia. She was in her usual health up to the time of labour. These cases are always sources of great anxiety to medical men. The only satisfactory way of dealing with them is to stay by them till after delivery, and to take a professional neighbour or friend into immediate consultation as to the best mode of effecting delivery.

"TRAUMATIC ALBUMINURIA."

UNDER this heading M. Terillon records in the March number of the *Revue Mensuelle* the following interesting case:—The patient, twenty-nine years of age, falling from a third floor when intoxicated, sustained a compound fracture of the left radius and ulna just above the wrist, with marked backward displacement of the lower fragment of the radius. He was admitted on the 3rd of June into Saint Antoine Hospital, and in the night tore off the bandages and dressing in an attack of alcoholic delirium. Diffuse cellulitis followed, with much deep-seated suppuration. On July 5th the bones, the radius particularly, were found to be denuded, and inflammatory œdema involved the upper arm as high as the shoulder. In spite of energetic administration of tonics, and lessening of the quantity of discharge, the patient remained very prostrate; and on the 10th of July there was noticed to be puffiness of the face and slight œdema of the ankles. The urine was examined, and found to contain a considerable quantity of albumen. On the 11th there was general anasarca, the albuminuria was excessive, and the patient in a very weak condition. M. Terillon felt that the only chance of saving the life of the patient was by resorting to amputation, and this was performed next day in the lower third of the arm through the inflamed and œdematous tissues. Examination of the forearm showed entire necrosis of the radius and ulna, which were bathed in pus. The dropsy and albuminuria rapidly subsided, and the general condition as rapidly improved. The progress of the case was, however, retarded by a recurrence of the renal symptoms on the 23rd of July, coincidently with increased discharge from the stump. On the 24th and 25th there was suppression of urine, and the patient had an attack of uræmia, becoming profoundly comatose. He rallied from this attack, and on the 26th the urine, although scanty, was free from albumen. The stump assumed a more healthy appearance, and on the 2nd of August he was able to get up. On the 15th August there was again a small quantity of albumen to be found in the urine, and a small abscess of the external ear, which had been forming a few days, was opened. From that date convalescence was uninterrupted, and he left the hospital completely cured on the 8th of September. He was seen several times between that date and the 25th of December, and was always found in good health, and his urine perfectly free from albumen.

M. Terrillon, in commenting on the case, states it to be his intention to publish, at some future date, some observations upon albuminuria sequential to surgical lesions. He justifies the amputation in the present case by the extensive disorganisation of the limb removed, the apparently recent date of the renal lesion, and the rapid decline in the strength of the patient from the exhausting suppuration. He acknowledges the gravity of performing operations when there is albumen present in the urine, but in viewing the sequence of events, and taking into consideration the previously healthy condition of the patient, he concluded that the nephritis was dependent upon the local suppuration and necrosis. The rapidity with which the anasarca and the albuminuria disappeared after the removal of the limb favoured this view, but the grave and sudden recurrence of the albuminuria, with prolonged uræmic coma, is inexplicable. M. Verneuil, who is one of the editors of the journal in which this paper appears, and who, as is well known, is one of the most ardent teachers of the interrelations of traumatism and diathesis, appends a note at the foot of the article in which he points out that, besides cases of albuminuria antecedent to injuries (by far the most serious cases for surgical treatment), there are cases of inflammatory surgical affections, as cellulitis, erysipelas, anthrax, osteitis, acute periostitis, &c., in which albuminuria may be primarily started in subjects who, before the onset of the local disease, presented no symptoms of renal lesion. The distinction is a well-recognised one, but cannot be too prominently insisted upon.

THE RICHMOND WATER DIFFICULTY.

THE sympathy of all sanitarians is due to those local authorities who are enterprising enough to face the difficulties in the way of taking upon themselves the responsibilities of supplying their district with water; more especially in cases where the main object is to substitute a pure for a polluted source of supply. All the incidents which led to the present water difficulty in Richmond naturally inclined to the warmest sympathy with the vestry in their efforts to protect, so far as was possible, the ratepayers from the dangers and inconvenience to be feared from the unwarrantable course taken by the Southwark and Vauxhall Company in cutting off their water supply, on the shortest notice, before the Richmond Vestry were in a position to undertake the supply themselves. Under these circumstances it is much to be regretted that through a series of blunders, and through a want of confidence either in their own judgment or in the forbearance of the ratepayers, a very strong opposition has been raised to the course adopted by the vestry in the matter, which has culminated in a memorial to the Local Government Board for advice, and for an injunction to prevent the vestry from pursuing their project for taking water direct from the river Thames at Richmond, to be used after running it through a filter-bed for various and undefined purposes. This project of the vestry is one which cannot be too strongly deprecated, and, unless voluntarily abandoned, will doubtless be condemned by the Local Government Board. The sooner the vestry acknowledge their blunder and retrace their steps the better it will be for their credit and the finances of the ratepayers which are now being uselessly expended. The Thames water at Richmond is not fit for any domestic purposes, and the proposition for its use comes badly from a local authority which aims at supplying its district with a water superior to that delivered by the Southwark and Vauxhall Company. It is due to the Richmond ratepayers to know, on the best professional authority, the actual prospects of their new artesian well, and should these not promise an early and favourable solution of the difficulty, it is clearly the duty of the vestry, unpleasant as it may be, to endeavour to come to an arrangement with the Southwark and Vauxhall Company for a temporary

supply by meter, which it is reported they are willing to afford. That Richmond during the approaching summer should be left in uncertainty as to a sufficient water-supply is as undesirable as it is important that under no pretext whatever ought the vestry to be allowed to supplement their at present insufficient supply with water taken direct from the Thames at Richmond.

UNQUALIFIED MEDICAL PRACTITIONERS IN DERBYSHIRE.

THE sixth column of the Death Register affords reliable indication of the proportion of unqualified medical practitioners in any given locality. Hence it becomes important that medical officers of health should in their periodical reports invariably state the proportion of deaths of which the cause is certified by registered practitioners or by coroners, and of those of which the cause is uncertified. Our attention has recently been called to the large number of uncertified causes of death in the registration subdistrict of Glossop in Derbyshire, where it is equal to 30 per cent. As there are three registered practitioners in Glossop, and one who lives just outside the town, there appears to be no reason why so large a share of the medical practice should be in the hands of unqualified practitioners. One of this fraternity is reported to have had a very fair practice for thirty-five years, and to have been assisted during the last eight years by his son, although neither of them possesses any qualification; the son has indeed been up for examination several times, but without success. There are, in addition, other unqualified practitioners, prescribing druggists, and unqualified assistants, who attend patients, vaccinate, give written statements of causes of death, &c. Thus the large proportion of uncertified causes of death are fully accounted for, as, in addition to the four registered practitioners, there are five unqualified practitioners in the neighbourhood, all doing a fair practice, without counting two unqualified assistants. It is worthy of comment that in Glossop, as elsewhere, most of the unqualified practitioners have originally acted as unqualified assistants to qualified practitioners, and have afterwards set up in practice on their own account. The important question for consideration is the best means for putting a stop to this large proportion of unqualified practice in Glossop; and the large share of success which has attended the efforts of Medical Defence Associations in East London and other localities points conclusively to the need for the formation of a similar association in Derbyshire.

IDIOCY AND INSANITY.

VICE-CHANCELLOR MALINS, in the case of a widow who first advertised for a husband and then made an unguarded settlement, recently remarked that he was surprised she had no friend to put her in a lunatic asylum. If all the weak-minded women who do silly things were locked up in asylums the world might be more comfortable and considerably less crowded. It is, however, a question whether folly can be accepted as evidence of insanity. His Honour's remark was probably a pleasantry, but it expresses a popular persuasion—namely, that any act particularly short-sighted must be the outcome of an unsound mind. The occasion may, therefore, serve to point out that weakness and disease are two totally different conditions. Idiocy and insanity have nothing in common. They stand as widely apart as clubfoot and dislocation of the ankle-joint, and require wholly diverse treatment. It is even probable that an imperfectly developed brain is less likely to become the seat of actual disease than one which has attained normal proportions. In this respect the physical organ does not resemble its mental counterpart, or expression, the mind. The stability of faculties composing the mental and moral character is manifestly, in great measure, dependent upon their development. The tendency to retrograde grows less as the process of consolidation is matured. It is, however, apparent that brains not highly developed, while exhibiting a proclivity to reproduce the purely animal instincts, do not seem exposed to the forms of disorder and disease to which more highly organised organs are liable. Within certain limits this has the effect of giving small-brained and little-minded people an immunity from actual insanity, and it is conceivable that the most ridiculous or puerile exploits may be performed by individuals in no sense fit to be placed under treatment for mental disease. This consideration has a bearing on the proposal to place inebriates under medical supervision as unsound of mind. We venture to think the wrong-doing of the witless, so far as it affects others, at least, should be visited with the penalty of an offence rather than dealt with as a disease.

THE "SPORT" OF PIGEON SHOOTING.

THOSE who have been present at any of the pigeon-shooting matches near London will not be surprised that attention has again been called to their brutality. It is, we believe, no uncommon circumstance that the dog employed to find the birds quietly takes one or two off the trap before rising. The exhausted and tame pigeon stands exposed on the spot after the sides have fallen, and will not be "persuaded" to stir. How complete the inaction must be may be inferred from the fact that, walking up leisurely, the dog can take the bird in his mouth and bring it back amid the merriment of the onlookers. This will give anyone with an idea of shooting a fair notion of the "sport" enjoyed, while it will probably impress those not wholly devoid of humane instincts with the brutality of a practice which is, in fact, "slaughter," not one whit more respectable or manly—we regret that it should be necessary to add, *womanly*—than the practice of hunting cats or rat-killing. The police very properly put down these last-mentioned exploits. Why should they not be instructed to interfere in the other "pastime"? Surely, little consideration need be shown for the opinions of "gentlemen" and "ladies" who lack the zest for more exhilarating amusement than that supplied by knocking over tame pigeons.

EPIDEMIC DIPHTHERIA IN BROMLEY, KENT.

A TABLE in the Registrar-General's Annual Summary, just published, shows that of all the suburban districts around London, the highest zymotic death-rate during 1876 prevailed in Bromley, Kent. This zymotic death-rate was mainly due to the epidemic prevalence of diphtheria during the latter portion of the year, although numerous fatal cases of measles, whooping-cough, enteric fever, and infantile diarrhœa also conduced to this result. The largest portion of the population of Bromley district, and a still larger portion of the zymotic fatality, occurred within the parish and Local Board District of Bromley. The population in this parish very nearly doubled itself between 1861 and 1871, and it has since continued to increase rapidly. To meet the demand for house accommodation, a good deal of inferior cottage property has been built, much of which is overcrowded, and in many respects inherently perilous to health. Many rows of cottages are drained into cesspools, and supplied by water from shallow wells in dangerous proximity thereto, although the mains of the Kent Water Company are laid in closely neighbouring roads. There appears, moreover, to be no well-organised scavenging system, which is indispensable even to comparative safety in the use of cesspools. There is a strong local feeling that small property owners are too well represented on the

Local Board, and it is confidently affirmed, incredible as it may seem, that the inspector of nuisances to the Board himself owns some cottage property with the sanitary defects before alluded to, and is the son of the owner of a good deal more of a similar description. Since the beginning of the present month diphtheria has, in several instances, proved fatal in these cottages, and there appears to be strong presumptive evidence that the epidemic, if not entirely, is in a great measure, due to the impure water-supply which the local sanitary authority still allows to be used. The inaction of the Local Board of Bromley probably only reflects the apathy of the majority of the local residents in health matters; it behoves, therefore, the minority, in face of the now excessive fatality of zymotic disease, to take prompt measures for the formation of a local Sanitary Association, which might there, as it has done elsewhere, do much to promote a policy of sanitary progress, and to secure the due representation of this policy at the next Local Board election.

THE GROCERS' LICENCE FOR SPIRITS, WINES, ETC.

A SELECT COMMITTEE of the House of Peers is now investigating the subject of intemperance in the use of alcoholic drinks, with a view to remedial legislation. It is desired to obtain a formal expression of opinion by members of the medical profession on the subject of the grocers' licence, which is believed to have largely increased the facilities for "secret drinking," and contributed to the increase of that pernicious practice. We have succeeded in obtaining for the subject the attention of the Committee, and we now seek the support of the profession. We have to request that our medical readers will sign the protest printed on the page facing Dr. Williams' lecture, and, cutting it out, return by an early post. The papers so placed at our disposal will be submitted to the Committee in due course. The opportunity of reform is so important, and the social mischief wrought by this licence so notorious, that no argument can be needed to bring the matter home to the profession. Whatever may be thought of the use of alcoholic liquors for ordinary purposes, all must, we think, agree that the trade should be carried on in *public*, not by a system of sale which places intoxicating drinks within reach of women and children visiting the grocer's shop for ordinary purposes, and favours its *covert* use. Those who feel with us on this point will be not unwilling to aid in the removal of a source of evil which we hold to be prolific of sorrow and wrong.

We have further to ask that, in returning the protest signed, members of the profession will favour us with special information bearing on the question raised, and illustrating the mischievous effects of secret drinking.

EAST LONDON HOSPITAL FOR CHILDREN.

THE new buildings of the East London Hospital for Children, situated in Shadwell, were formally opened on Wednesday last by Her Royal Highness the Duchess of Teck. The exigencies of space prevent us from giving, this week, more than a brief description of the opening ceremony, the success of which will, we trust, prove a hopeful augury of the future well-being of the hospital. Her Royal Highness, who was accompanied by her consort, walked through the various wards, and evinced a kindly interest in the little sufferers who occupied the beds. At the *déjeuner* which followed, the chair was taken by Lord Enfield, who was supported Mr. Ritchie, M.P., and Mr. Charrington; and among the friends of the institution present were the clergy of the district, Mr. Whitbread, Mr. Norris, Mr. Sharp, Dr. Eustace Smith, Mr. H. A. Reeves, Mr. Todd, and others. The usual loyal toasts were given, after which "Prosperity to the East London Hospital for Children" was proposed and adequately received. The toast of the "Medical and Surgical Staff" was responded to in felicitous terms by Mr. A. Cæsar. A most satisfactory financial statement was made by the Treasurer, after which the company dispersed. The East London Hospital for Children is, we hope, now launched on a long career of usefulness and honour; but in the tide of its prosperity it should never be forgotten that the institution was founded, at his own cost, by a noble-hearted member of our profession—Nathaniel Heckford,—who died too soon for the realisation of the auspicious promise of his early manhood, but not too soon for the bequest of a bright example and an unsullied name.

EXAMINERS AT THE UNIVERSITY OF LONDON.

PROF. E. RAY LANKESTER and Dr. Allman have been elected Examiners in Comparative Anatomy and Zoology, Prof. Wilson Fox and Dr. Murchison in Medicine, Messrs. Cooper Forster and Savory in Surgery, Mr. Callender and Professor Curnow in Anatomy, Prof. Rutherford and Dr. Burdon Sanderson, F.R.S., in Physiology, Dr. J. Hall Davis and Prof. W. S. Playfair in Obstetric Medicine, Dr. Brunton, F.R.S., and Prof. S. Ringer in Materia Medica, Prof. Ferrier, F.R.S., and Dr. Stevenson in Forensic Medicine, Dr. Wm. Farr, F.R.S., and Mr. John Simon, F.R.S., in Hygiene, and Dr. Fraser, F.R.S., and Captain Douglas Galton, F.R.S., in Sanitary Law and Engineering. The only changes for the ensuing year are therefore in Comparative Anatomy, Physiology, and Forensic Medicine, as far as the medical examinations are concerned. We would point out to our junior readers that the Conjoint Honours Examinations for the First B.Sc. and Preliminary Scientific Examinations will be carried on under the *new* First B.Sc. regulations.

THE HEALTH OF THE ARMY.

THE average annual strength of the British army at home and abroad in 1875, as computed from the returns received by the Army Medical Department, was 169,235 non-commissioned officers and men; the admissions into hospital in this force were 166,619, and the deaths 2169. The rates represented by these returns are 986·3 admissions into hospital, and 12·47 deaths per 1000 of the average annual strength, the latter calculated on a strength of 173,888, which includes detached men. The constantly non-effective from sickness were 45·38, and there were 19·36 sent home as invalided, and 19·80 per 1000 of mean strength discharged as invalids during the same year.

PESHAWUR.

PESHAWUR is well known to be one of the most, if not the most, unhealthy of our Indian military stations. On strategical grounds its importance is such that we cannot afford to abandon it. Something has been done towards counteracting or avoiding its evil influences by locating the troops at Cherat, in its immediate neighbourhood, but it becomes a matter for grave consideration whether nothing can be done towards the improvement of Peshawur itself. In 1874 the highest admission rate in the Bengal Presidency, according to the recently published blue-book of the Army Medical Department, was at this station. Fevers, both of the continued and paroxysmal groups, but chiefly those of the latter, caused the excessive rate of sickness. In one regiment the admissions for fevers of all kinds were 2048 in number, of which 1668 were for ague or remittent fever. Respecting paroxysmal fevers, the medical officer of the regiment writes:—"These forms of fever prevailed epidemi-

cally during the last four months of the year, and they reduced the regiment to such a state of inefficiency that all duties, with the exception of the necessary guards, had to be suspended from the 1st of September to the 31st of December." In addition to a large sick list, 120 convalescents were sent at different times to Cherat, and 140 to a convalescent camp in the district. The regiment was in its first year of service at Peshawur. We learn that the prevalence of these fevers in another corps quartered there, and in its second year of residence, was only about half as great.

THE ARCTIC SCURVY INQUIRY.

SINCE we last referred to this well-worn subject, at least two questions have been asked in the House of Commons by the First Lord of the Admiralty as to when the report of Sir James Hope's committee will appear. The stereotyped reply given on these last occasions by Mr. Egerton (in the absence of Mr. Ward Hunt) was, as heretofore, "As soon as possible." It appears to us that the delay is undignified and humiliating in the last degree. It is perfectly well known that the report has been completed and signed for many weeks, that the committee is now dissolved, and that the general narrative has been published at great length and at an enormous expense. Meanwhile, it would appear that "my Lords" object to the strictures passed upon the commander of the Expedition, and that the chairman and members of the committee consistently and persistently decline to alter or modify them. We earnestly hope that the report will be forthcoming without more delay.

CLEANSING AND DISINFECTING.

THERE seems much reason to fear that too little attention has been bestowed on the important question, "What becomes of germs of disease after a cleansing process?" Filth is washed away, but where? If water holding the poison in suspension is thrown into ordinary drains it will become the agent for distributing disease. This is a very grave consideration. Disinfecting, properly so called, is not a precaution commonly carried out. It is generally deemed sufficient to purify the particular articles supposed to be foul, without regard to what the destination of the germs removed may be. It is even doubtful whether this practical point receives a due share of thought in public institutions. Certainly there is room for improvement in the domestic and laundry methods of "purification." The only effectual measure for arresting the spread of infection is one which destroys the vitality of the germ where it is found. We shall never be safe until a process of this nature forms part of the usual proceeding for cleansing articles of clothing and bedding in use in private families and at hospitals. To strike at the root of the danger the means needful for the extinction of vitality in morbific organisms must be invariably employed.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

AT the meeting of the council of the Poor-law Medical Officers' Association, held at their rooms, 3, Bolt-court, Fleet-street, the question of the alleged abuse of authority by the police in transferring their supposed sick cases from the streets or from the cells to the infirmaries of the workhouses was discussed, when it was resolved that application be made to the medical officers of the metropolitan and certain provincial urban workhouses requesting them to forward to the honorary secretary, Mr. J. W. Barnes, any information they can supply bearing on this subject. The annual meeting of the Association will take place at 3, Bolt-court, on Thursday, 21st June, at 3 P.M.

THE PLAGUE.

THE latest news from the East states that the plague in Bagdad is rapidly increasing, although the returns, as far as they have been made public, do not indicate that as yet the disease is either more prevalent or more virulent than it was at the same period last year. The deaths from the disease recorded in the week ending the 22nd of April were 258, about the same number, it is said, as occurred in the corresponding week of 1876. No further news as to plague in Resht has as yet come to hand, and on the principle that no news is good news, let us hope that the telegram of the 25th ult. from Teheran may have been a false alarm.

THE CONJOINT SCHEME.

WE understand that all difficulty in the way of a complete agreement between the University of Cambridge and the other co-operating medical authorities relative to the Conjoint Scheme has virtually been removed. The University will not insist, it is stated, upon its proposal that the scheme should virtually terminate at the end of a certain term of years.

A BILL has been introduced into the legislature of the United States which is of great interest to doctors and dentists. It provides for the deposit of security for the payment of damages and costs by the plaintiff in actions or proceedings against physicians, surgeons, and dentists for damages. An American contemporary, in expressing its approval of the measure, says that the history of actions for malpraxis proves that, in the majority of instances of the sort, the charges are utterly unfounded, and are either made as offsets to bills for professional services or "for purposes of revenge" on the part of the plaintiff, or on account of the "covert connivance of some jealous professional rival." It is hoped the new Bill, if carried into law, will be the means of stopping groundless plaints of maltreatment.

THE *Pharmaceutical Journal* states that Baron von Mueller, of Melbourne, has at length determined the botanical source of the "pitury," a stimulant long know to be in use by the aborigines of Central Australia, and said to be of very great power. After some years of effort to obtain a specimen of the plant he has now received some leaves, and has with certainty determined them to belong to Duboisia hopwoodii, a bush referred to the order Scrophulariacem, and which grows sparingly in the desert scrubs from the Darling River to West Australia. It appears that the natives chew the leaves to fortify them during their long foot journeys through the desert, in the same manner as coca-leaves are used in Bolivia.

THE defects, from a sanitary point of view, in Redruth and its neighbourhood, to which we called attention last week, have awakened so much concern in the minds of the inhabitants that a proposition has been made to form an association, having for its chief objects the promotion of sanitary improvement in connexion with existing institutions, and the extension of the knowledge of the laws of health among the residents of Redruth, Gwennap, Illogan, and Stithians.

EIGHT cases of transfusion were lately performed in one of the Philadelphia hospitals, in five of which the results were highly satisfactory. In one case, a very low stage of puerperal fever, the pulse was reduced from 160 to 120 per minute in a short time. From ten to twelve ounces of defibrinated blood is generally injected.

THERE are few of our readers who are not aware that quinine is now about three times the value it was a few months ago. The probability that the article will become dearer still leads us to suggest the use of the mixed chinchona alkaloids, the trials of which by Indian medical officers we have frequently commented on. Although its exhibition in India was not found uniformly or even generally successful, it is quite possible that better results may be obtained with it at home. The two chief objections against its adoption as a substitute for quinine in India were its insolubility and tendency to produce gastric irritation. We believe we are right in saying that some tons of the mixed chinchona alkaloids are stored up in Madras and looked upon as a "drug" in the market.

THE twenty-first annual report of the Trustees of the State Lunatic Hospital at Northampton, Massachusetts, was published recently. It is a State document, and contains much interesting information. The medical superintendent of the establishment, Dr. P. Earle, takes a rather gloomy view of the treatment of the insane. He believes that, in round numbers, of every ten persons attacked by insanity, five recover and five die, sooner or later, during the attack. Of the five who recover not more than two remain well during the rest of their lives, and the other three sustain subsequent attacks, during which at least two of them die.

MR. W. P. HUMPHRY, of Trinity College, Cambridge, son of Professor Humphry, was last Tuesday elected to the vacant office of Esquire Bedell to the University, by a majority of thirty-six votes.

THE Sailors' Home, Falmouth, has just received two men suffering from scurvy and one from rheumatism, part of the crew of the ship *Arcturus*, now lying in Falmouth harbour.

THE College of Physicians has decided to give its usual *conversazione* this year, and a committee has been appointed to promote its success.

THE ROYAL ACADEMY OF ARTS.

IT is an interesting exception to established precedents that in the present exhibition of the Royal Academy the first place must undeniably be given to the sculptor instead of the painter. The group in bronze, by Mr. F. Leighton, of an "Athlete wrestling with a Python," is the work which, from its own merits, and not because it emanates from one who has hitherto followed a different branch of art, must command the greatest interest. A grandly modeled nude figure, with face presenting the aspect of desperate intensity, and muscles standing out rigidly from the bones, grasps the formidable monster near the neck, his extended forearm just escaping the forked tongue which darts from the widely opened jaws. The body of the snake, winding across the man's back, curls twice round his left thigh, and thence to the right leg, which it clings to with a deadly grasp. So much purchase does the snake obtain by this, that it is dragging the man's left foot off the ground in its writhings. The man's attitude is admirably chosen, with the legs widely separated so as to obtain the greatest *point d'appui* for muscular action. As for the python, it is alive, and one can see its scaly body writhe again! Great praise must also be given to another piece of sculpture, by Lord Ronald Gower, illustrating the famous, but we believe somewhat apocryphal saying, "La garde meurt et ne se rend pas," in which the defiance of one of Napoleon's guards in his dying fall is admirably pourtrayed.

Amongst the paintings no such striking efforts stand out from the general mass as those which Messrs. Poynter, Leighton, and Fildes exhibited last year. The general average of merit, however—and this is, after all, perhaps, the best evidence of the progress of art—appears to be somewhat higher than on any previous occasion, and it is not easy, therefore, to single out works which are likely to attract especial attention. Mr. Millais gives us a "Yeoman of the Guard," conspicuous for the skill with which he has dealt with the difficulties of a brilliant scarlet uniform; another of his delicious Scotch river scenes, "The sound of many waters"; and a love scene called "Yes," which is sure to be popular. It is a parting, in the hall of a mansion, between a young man of the period in an Ulster coat and a young lady draped in black. A labeled portmanteau, and a bundle of sticks and umbrella, indicate that the acceptance has only just happened in time, whilst the earnest gaze of the lover fills us with confidence that absence will not, in his case, make the heart grow, at any rate, less fond. Mr. Calderon gives us a more important work than he has yet produced in his illustration of Tennyson's poem, "Home they brought her warrior dead." The point of time chosen is the last verse—

> "Rose, a nurse of ninety years,
> Set his child upon her knee;
> Like summer tempest came her tears:
> 'Sweet, my child, I live for thee.'"

This picture is a very affecting one, and tells its story excellently well.

In "An Egyptian Feast," by Mr. E. Long, the description given by Herodotus of the custom of bringing round a wooden image of a corpse in the midst of a social gathering is finely rendered. The painting is of great size, and contains a vast number of figures. The varying expressions upon the countenances of the guests are shown with consummate skill. One only doubts whether, as the custom was a common one, the guests would actually take much notice of the somewhat comical-looking mummy by which death was represented. Mr. Marcus Stone, in his picture called "Sacrifice," seems determined to show us that his recent well-merited elevation to the associateship is not likely, as has sometimes happened in the case of others, to check his zeal for good honest work. The subject is full of interest, and the tone of the painting admirably subdued. A young lady, her face exhibiting signs of deep distress, burns a letter in the presence of her aged parents, who evince in silence their sympathy with the emotion occasioned by a "sacrifice," which is hard, but no doubt necessary.

There is, to our minds, no finer picture in the exhibition than one by Mr. R. W. Macbeth, called "Potato Harvest in the Fens." Out of a subject which would hardly promise much effect, the skill of the artist has produced a work of the highest merit. A number of females, of different ages, are picking potatoes from the earth which has been newly turned up by the plough. It is impossible to describe the remarkably beautiful effects of colour obtained out of such simple material, whilst the composition and drawing leave nothing to be desired. The mode in which the horses employed in ploughing, and in dragging the cart, are grouped in with the human figures is peculiarly skilful, and the picture is one that can be returned to again and again with fresh pleasure. The work hangs in the Lecture-room. It is a significant illustration of the *embarras des richesses* with which the Exhibition this year has been visited, that a picture like this, with many others by men of mark, have found their way into the room which is commonly considered the least desirable in the Academy; on the same walls hang works by Fildes, Herkomer, Philippoteaux, "The Battle of the Alma," Brett, Farquharson, Yeames. The "Death of Amy Robsart," by the last-named gentleman, is a work of great power, and if the painter has somewhat softened down the

horrors belonging to a body dead from suffocation, he has still left sufficient to call up a scene of awful tragedy.

The predominance of the sadder side of human experience is very striking in this exhibition. The majority of the works we have already noticed illustrate this; but there are very many more in which death, disease, and suffering in one form or another, serve as subjects for the artist's genius. F. Fagerlin gives us the interior of a French peasant's cottage, where the head of the family is passing away, his wife and aged mother receiving the sad announcement, "No hope!" from the village doctor who is visiting the dying man. H. Wallis has "The Physician," an old man mixing a potion for a patient, whilst a number of sick are waiting in a street (Italian?) to take advantage of his advice. J. C. Dollman, a young and rising painter, presents us with the "Burial of an Indian Chief." Mr. Waterhouse has an interesting picture of "A Sick Child brought into the Temple of Æsculapius." Votive offerings are being made to the statue of the god on behalf of a little girl, of whose case we feel happy in being able from her appearance to give a favourable prognosis. The picture is nicely painted, and the sickness not offensively obtruded.

Of portraits, busts, and works of peculiar medical interest, there are a few examples. Sir William Gull occupies a conspicuous position in the large room, painted by the President. It is a good resemblance of the physician "in fashion," but somewhat wanting in animation. A better likeness, to our mind, is that of Dr. George Bird, whose artistic sympathy makes his presence on these walls appear a thing of course. The well-known face of Mr. Thos. Hyde Hills has not received the happiest of treatment from Mr. Charles Landseer, and room is left for regret that the late Sir Edwin did not himself undertake the presentment of his tried friend. An excellent bust in terra-cotta of Mr. Prescott Hewett stands in the central hall, the work of J. E. Boehm; and a less satisfactory one, in the same material, of Dr. W. B. Carpenter, C.B., in the sculpture gallery. Sir Henry Thompson exhibits a small painting—"Court of the Mosque, Palace of the Alhambra,"—one out of many charming fruits of a holiday in Spain. Dr. Evershed has the great and deserved compliment paid him of seeing no less than five of his graceful etchings hung upon the walls, where also appears Mr. Propert's "Relic of the Past," which we have lately noticed in this journal.

Correspondence.

"Audi alteram partem."

TRANSFUSION.

To the Editor of THE LANCET.

SIR,—In your issue of the 31st of March is reported a very interesting case of direct blood-transfusion, about which I ask your permission to say a few words.

Messrs. T. R. Glynn, M.B., and Gorst admitted into the Liverpool Royal Infirmary on Nov. 13th, 1876, a sailor aged forty-two, who had suffered for fourteen months from rapidly progressing loss of strength, which was diagnosed "pernicious anæmia." The disease proving intractable under all ordinary treatment, however well carried out, the physician conceived the excellent idea of attempting direct transfusion, and accomplished it with great skill on the 20th of December, making use of Aveling's instrument. As is always the case when the transfusion is well managed, the operation produced a great improvement in the condition of the patient, who soon recovered a little of his strength and was able to get up, and was sent to the Convalescent Home. But the improvement was not of long duration, and the patient expired two months after the transfusion.

The operators regret that the patient was not sent back to the infirmary, to undergo a second transfusion there. For my part I much regret it from a scientific point of view. For no doubt the operators would not again have chosen an invalid "suffering from stiff knee" to supply the blood, and no doubt also they would not have had the same facility in operating, nor would the amelioration have lasted so short a time.

It is to the choice of the blood-giver that I wish to call attention. I myself, too, was once obliged (having no choice) at St. Petersburg to transfuse into a patient, who was suffering from anæmia arising from prolonged suppuration, the blood of a "healthy man from one of the surgical wards, who was suffering from" a simple fracture of the leg, which was almost entirely consolidated; and I, too, have remarked that the improvement of the patient was of short duration, whilst patients of the same class, to whom I had given blood drawn from men who were free from any wound, and working and living out of the hospital, had recovered more quickly and without relapse.

I believe that a healthy man, deprived of the power of locomotion by a broken leg, like the one at St. Petersburg, and still more the blood-giver at the Liverpool Infirmary, who had, doubtless, suffered much longer from the complaint in his knee, endures a progressive deterioration of the constitution of the blood, that the red blood-corpuscles lose their functional activity, and that the fibrin loses its normal plasticity. Everyone knows that a man with a broken limb, even if there be no hæmorrhage, when he has lain long in bed, loses his strength, eats less, respires less, has a weaker pulse and lower temperature—in a word, that all his organs lose some part of their normal activity. This is so much the case that many weeks are needed, after a consolidation of the fracture of the leg, for the man to recover his former strength and capacity for work. Therefore it is not right to receive as the blood-giver a man who is healthy, but who has been obliged to keep his bed, and above all in the wards of a hospital.

I have said that the fibrin in the blood of an invalid loses its normal plasticity, and I have remarked a new proof of this in the facility with which the blood of the blood-giver at Liverpool traversed the Aveling's instrument to the amount of "eighteen or twenty ounces," without obstructing the metal cannulas by the progressive deposit of a coagulated layer.

Dr. Aveling admits without dispute the progressive deposit of layers of coagulated fibrin in his metal cannulas; and this finally obstructs them if the transfusion last any length of time. He says, "I should be glad to be able to dispense with passing the efferent tube into the vein of the blood-donor, and am making experiments to that end." This will be an excellent modification of his instrument; and to effect it nothing more is necessary than to keep upon the vein a small cylinder for the blood to spirt into; and to keep this cylinder on the skin, nothing is better than to enclose the cylinder in a cupping-glass. Then, to expel the air from the instrument, he will provide it with two branch tubes to introduce a current of water, and to expel it without forcing it into the veins of the person operated on, as he does at present. And it is very important that he should replace his metal efferent cannula by one of pure, hard caoutchouc. He will then find that the blood hardly coagulates at all in the instrument, and he will provide the hollow ball with two valves, to avoid the difficult manœuvre of the fingers by which the tube is pressed alternately in front of and behind the ball to allow of the aspiration and ejection of the blood.

In fine, when all this has been constructed of natural, non-sulphuretted caoutchouc, he will have a perfect transfuser, which produces no coagulation in the limited time of a transfusing operation. This instrument will be composed of a cylinder enclosed in a cupping-glass, a hollow ball with valves, two branch tubes for the passage of the water, and a non-metallic cannula. Then I will entreat my very honourable colleague to remember that this transfuser has been in existence for fifteen years, that it has been tested, and that it is called "Rousset's transfuser."

I am, Sir, your obedient servant,

Gloucester-place, Hyde-park, April, 1877. DR. ROUSSET.

THE SMALL-POX EPIDEMIC.

To the Editor of THE LANCET.

SIR,—I am afraid the hopeful tone of your comments on the apparent decline of the small-pox epidemic will prove somewhat premature; for, although the number of cases admitted into the hospitals has somewhat diminished, I regret to say that among the more recent admissions there is a large proportion of cases of the very worst type, with a corresponding mortality. This, as you well know, indicates that the decline in numbers is probably only temporary, and that an increase may be expected to follow. It may therefore be said that, although the epidemic has existed in the metropolis for about nine months, and notwithstanding sufficient hospital accommodation has been provided for the poorer class of victims, the disease practically remains, if not unchecked, at any rate unsubdued. Is it not time that positive measures were taken to stamp it out, or how long will a supine public be content to allow it to remain in their midst? Undoubtedly, it *could* be put an end to, and in a very few weeks, were proper means used for the purpose. Who is to direct and enforce such measures? As has so often been urged in your columns, there is no central sanitary authority capable of acting. One simple measure may be mentioned, which, if properly adopted, would undoubtedly soon check the epidemic—viz., a house-to-house visitation for the discovery and vaccination of every unvaccinated person without distinction of age or sex. The local authorities would, I am persuaded, readily carry out, so far as their powers permit, any such measure that was recommended to them by competent authority. But to whom are they to look for guidance? To the Local Government Board? But this Board appears to want either the ability or the desire, or both, to act in the matter. Weeks ago you published the report of the Managers of the Metropolitan Asylums Board, urging the Local Government Board to this effect, and their appeal has been largely endorsed by the vestries and district boards of the metropolis. This report was duly presented by the managers to the Local Government Board, but this Board have taken no notice of the communication—they have not even acknowledged its receipt! Is there not one among the metropolitan representatives in Parliament able and willing to take up this question—a question of literally vital importance? Hundreds of people are dying around us needlessly; thousands more are suffering equally needlessly; and many thousands of pounds are being spent unnecessarily; and as yet not a word on the subject has been heard from anyone in power or authority.

I am, Sir, yours, &c.,

WILLIAM S. CURTIS, M.D.

Kennington-park-road, S.E., May 1st, 1877.

CONSULTATION OR CO-OPERATION WITH HOMŒOPATHS.

To the Editor of THE LANCET.

SIR,—With reference to the question as to how far a surgeon may co-operate with a homœopathic practitioner in a case of emergency, I think an incident which occurred to myself may afford an answer. Some time ago an old friend of mine, who had been originally in our own ranks, and had latterly been converted to homœopathy, called on me for the purpose of performing an operation for strangulated hernia upon one of his patients. I informed him that I could not meet him in consultation, but as the case was urgent I would give my services. I drove with him to the house, and suggested that he had better inform the patient as to the position of affairs, and then allow me to go up stairs and do what was necessary. To this suggestion my friend acceded at once, and whilst I was examining the patient he remained below. I found that an operation was not required, and I took my departure. Had an operation been needful I should have performed it at once, and certainly should not have objected to the presence of the practitioner in such urgency, but I should have insisted upon the whole conduct of the case subsequently.

I am, &c.,

Wimpole-street. HENRY SMITH.

DENTAL REFORM.

To the Editor of THE LANCET.

SIR,—I beg leave to express my obligations to Mr. Turner for giving that which purports to be the text of the resolution as amended by Mr. Tomes, of which I gave the spirit in a former communication. In the manuscript which I forwarded to you, the inverted commas were only placed before the title "dental surgeon, surgeon dentist, or dental practitioner, or dentist," and not at the head of the sentence referred to—a slight printer's error of which I acquainted Mr. Turner immediately, also correcting it in your journal of last week. A careful reading of the resolution, as now presented to you, shows that my interpretation was correct in each particular. The second resolution, which Mr. Turner quotes, does not alter its character in the slightest degree, as in the event of its ever being possible to register the special licence by legislative enactment, future qualified practitioners—that is to say, those holding surgical diplomas—would find themselves debarred from using the title "Dental *Surgeon* or *Surgeon* Dentist," whereas persons with no claim to call themselves surgeons would be permitted to adopt that title. The paradox is transparent. The two memorials presented to the College of Surgeons in 1857, and referred to in Mr. Turner's letter, are quite beyond the question. My objection, as well as that of others, to the proceedings of the Dental Reform Committee at its last meeting was the attack made upon the many qualified surgeons who have devoted themselves exclusively to the practice of dental surgery.

I am, Sir, your obedient servant,

May 2nd. S. CARTWRIGHT.

To the Editor of THE LANCET.

SIR,—I have read with the utmost surprise the statement of my friend Mr. Turner in your last number—viz., "that the Dental Reform Committee do not propose to interfere with vested interests." Mr. Turner must surely have forgotten what took place at the last meeting, and which has necessitated my sending him my resignation as a member of that Committee, and of which the following, though shortened, is otherwise a correct copy. I also append the clauses referred to in full.

I remain, Sir, yours, &c.,

ALFRED COLEMAN.

Savile-row, April 30th, 1877.

DEAR SIR,—I regret I can no longer consistently remain a member of the Dental Reform Committee. My ground for resigning is the following—VIZ.: At a meeting of the Executive Committee, held the 3rd November last, certain clauses were submitted which contemplated, unintentionally I was sure, the depriving of certain corporate bodies of privileges they at present possessed, and I urged how fatal to the cause in hand would be the opposition which would most assuredly be raised by those bodies to any measures purposing a restriction of their legal rights. The Executive Committee admitted the force of the reasoning, and adopted as an amendment the insertion of the words "with the exception of those by law already permitted to do so" in Clause 1 line 2, after the words "Royal College of Surgeons." This, to my mind, prudent and just course of proceeding, the General Committee, at their meeting of the 7th inst., rejected, and avowedly on the grounds, as distinctly stated by the proposer of the rejection, that it was desirable those corporate bodies should be deprived of such rights. Being a fellow of one such corporation and a licentiate of another, and having bound myself to uphold the honour and maintain the privileges of each, I can no longer remain the promoter of a movement which now has avowedly as one of its objects the deprivation of those bodies of certain of their legal rights. I cannot and do not believe that the dental reform movement, as it originated in Manchester, had other than pure and disinterested motives, and I most deeply regret this action of its committee, which, if persevered in, must prove suicidal to that I have elsewhere characterised as the most important movement for

good that has ever been attempted by the dental practitioners.

I am, dear Sir, yours truly,

To James S. Turner, Esq., Hon. Secretary, Dental Reform Committee. ALFRED COLEMAN.

Clauses proposed by the Dental Reform Committee.—1. That those persons only who possess the licentiateship of the Royal College of Surgeons shall be entitled to use the designation of dental surgeon, surgeon-dentist, or dental practitioner, or dentist. 2. That any person using either of the foregoing designations, unless entitled to do so, shall, on conviction before a County Court, be fined in a sum not exceeding for the first offence, &c. 3. That a special schedule be added to the Medical Act for the registration of qualified dental surgeons as such only, subject to such general conditions as apply to the registration of qualified medical practitioners in respect to fees, conduct, &c. 4. That the qualified dental practitioners alone shall be capable of recovering fees for dental operations, but that the mere making of artificial teeth shall not be considered a dental operation. 5. That nothing in this Act shall apply to the prejudice or hindrance of persons in practice before the passing of the Act, but in case of the question being raised it will be for the individual to prove the date of his entrance on practice.

MEDICAL FEES, AS PROPOSED IN THE NEW FACTORIES BILL.

To the Editor of THE LANCET.

SIR,—I send you the following extract from Clause 67 of the new Factories Bill, introduced by the Home Secretary:—

"*Fees for Certifying Surgeons for Examination of Children and Young Persons.*—In the absence of any agreement, the fees shall be those named in the following scale:—When the examination is at a factory or workshop not exceeding one mile from surgeon's residence, 2s. 6d. for each visit, and 6d. for each person after the first five examined at that visit. When the examination is at a factory or workshop more than one mile from the surgeon's residence, the above fees, and an additional 6d. for each complete half-mile over and above the mile. When the examination is not at the factory or workshop, but at the residence of the surgeon, or at some place, day, or hour appointed by the surgeon for the purpose, and published in the prescribed manner, 6d. for each person examined."

I make no comment, but simply ask if these fees are such as ought to be offered to members of the medical profession? A late Home Secretary is said to have remarked that "It is like a base lawyer's fee." I should rather say, it is a base medical fee, on which I hope you will take an early opportunity of freely commenting in your widely circulated journal.

I am, Sir, your obedient servant,

April 26th, 1877. FACTORY SURGEON.

THE ROYAL COLLEGE OF SURGEONS.

THE ordinary meeting of the Council was held on Thursday last, instead of on the 10th inst., in consequence of the meeting of the General Medical Council next week. After the transaction of routine business, the Jacksonian Prize was awarded to Mr. Harrison Cripps for the best essay "On the Treatment of Cancer of the Rectum, particularly as regards the possibility of curing or relieving the patient by excision of the affected part." After some conversation it was determined a special meeting of the Council shall be convened for Monday next to discuss fully the Conjoint Scheme, preparatory to its being laid before the General Medical Council. The draft of the amended regulations relating to the Fellowship was, like its predecessors, referred to a Special Committee. A proposal by Mr. John Marshall that the Council should reconsider the decision arrived at in October, 1872, by which it was determined to be inexpedient to give effect to Section 5 of the Charter, 15 Vict., with respect to the election in each year of two members of twenty years' standing to the Fellowship, was agreed to, subject to certain conditions to be defined at an early date.

THE ROYAL COLLEGE OF PHYSICIANS.

AT a meeting of the College of Physicians on April 26th, the following bye-law was passed:—"Any candidate for the College licence who shall have obtained a degree in medicine or surgery at a British, colonial, or foreign university recognised by the College, after a course of study and an examination satisfactory to the College, shall be exempt from re-examination on such subjects as shall in each case be considered unnecessary."

A resolution was passed asking the Council to draw up a report on the subject of exemptions, to be submitted to a future meeting.

The following is a list of the new Fellows of the College elected:—Dr. William John Little, Dr. William Henry Parsey, Dr. Charles Rooke Prance, Dr. Christian Godfried Heinrich Baümler, Dr. George Vivian Poore, Dr. William Jelly, Dr. Evan Buchanan Baxter, Dr. Frederick Thomas Roberts, Dr. Robert Farquharson, Dr. David Ferrier, Dr. Norman Moore.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

Monday, April 16th.

LONDONDERRY LUNATIC ASYLUM.

In reply to Mr. R. Smith, Sir M. HICKS-BEACH said: The Board of Governors of the District Lunatic Asylum of Londonderry proposed some little time ago to erect a new asylum, their existing asylum being very much overcrowded. They have, however, lately rescinded that decision, and the Lord-Lieutenant does not at present propose to recommend to the Privy Council to sanction the erection of a new asylum for Derry, but to inquire whether the present asylum might not be enlarged.

VIVISECTION.

Mr. HOLT moved the second reading of the Cruelty to Animals Bill, the object of which, he said, was to remedy a defect in "Martin's Act," by rendering punishable the performance of any cruel experiment on any vertebrate animal, whether domestic or not. The 4th section forbids all cruel operations, even with anæsthetics, except for the purpose of alleviating pain or curing the injured animal. Disclaiming any intention to attack scientific men, he contended that the Act of last year was not efficient.—Dr. CAMERON moved the rejection of the Bill, which, he said, would repeal the Act of last year, and this, he showed at some length, was strong enough to prevent the infliction of wanton cruelty.—Mr. HARDCASTLE supported the Bill because he believed it unsafe to trust scientific men, and to show to what lengths they were ready to go, he read to the House revolting details of cruel experiments performed by French surgeons and at St. Bartholomew's Hospital. He denied altogether the right of man to inflict such torture.—Mr. M'LAREN, who also supported the Bill, did not desire entire prohibition, but thought there was too much latitude allowed at present, and cited the testimony of Sir W. Fergusson, that no important discovery had been made through vivisection.—Mr. FORSYTH thought the Bill went too far, as, by prohibiting all vivisection, although the animal might have been reduced to a complete state of insensibility, we should deprive ourselves of one of the most useful sources of knowledge for the alleviation of human suffering.—Mr. COWPER TEMPLE contended that the Act of last year was not effective for its purpose, and Sir G. JENKINSON also spoke in favour of the Bill.—Sir H. SELWIN-IBBETSON pointed out that all the cruelties referred to belonged to a past state of things, and were dealt with by the Act of last year. This Act, he asserted, was a sufficient protection against cruelty, and in carrying it out, both in letter and spirit, the Home Secretary had met with no difficulty from scientific men.—Mr. HOLT replied; and, after some observations from Mr. BROMLEY-DAVENPORT, the Bill was thrown out, on a division, by 222 to 83.

THE Governors of the Glamorganshire and Monmouthshire Infirmary have resolved to appoint three additional medical officers to attend to the out-patients.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentleman was admitted a Licentiate of the College on April 26th:—

Sugden, D'Arcy, St. Bartholomew's Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examination for the diploma, were duly admitted Members of the College at a meeting of the Court of Examiners on the 26th ult.:—

Collingridge, William, Hornsey.
Dresser, Arthur K., Hammersmith.
Earle, Joseph H., L.S.A., Brentwood.
Edmunds, Richard, Bangor, North Wales.
Elsmere, Edward, Shrewsbury.
Evans, Charles W. de Lacy, Bangor, North Wales.
Gillard, Clarence R., L.S.A., Clapham-road.
Hammersley, Joseph, L.S.A., Lewisham.
Henchey, John H., M.D., Quebec.
Horrocks, Peter, L.S.A., Over Darwen.
Howat, George R., L.S.A., Southgate.
Jee, Henry C., Nuneaton.
Lee, Roger, L.S.A., Burton-on-Trent.
Lewis, Charles B., Wimbledon.
Meek, John W., L.S.A., Macclesfield.
Poynder, John, L.S.A., Southsea.
Williams, David J., Llandovery.
Wright, Alexander W., Trinidad, West Indies.
Wright, George A., Romford.

Of the 80 candidates examined on the 24th, 25th, and 26th ult., 59 satisfied the Court of Examiners and obtained their diplomas; 13 passed in Surgery, and when qualified in Medicine will be admitted Members; and 8 were referred for six months' further professional study. Seven candidates who had passed in Surgery at previous examinations, having subsequently obtained Medical qualifications recognised by the College, were also admitted Members.

The following gentlemen passed the primary examination in Anatomy and Physiology at meetings of the Board of Examiners on Monday, Tuesday, and Wednesday last:—

Chas. H. Gwynn, John B. S. Greathead, Daniel Ritchie, Henry Handford, M. L. Brown, John M. Chisholm, Bernard J. Guillemard, George W. Whiteley, Henry J. Clarke, and Robert P. White, Edinburgh; George H. Crowther, Wm. M. Hurtley, T. J. Hudson, Frederick W. England, Robert T. Farrer, and George D. Todd, Leeds; Peter S. Kendall, Edinburgh and University College; William Gruggen, Liverpool; A. Bland, Cork; Robt. D. Jones and Peter H. Emerson, King's College; B. Casement, William E. Thomas, and H. Parry Jones, Dublin; C. L. Young, Bristol; George B. Wray and Wm. D. C. Williams, University College; Augustus K. Morgan, Alfred H. Pierson, and Robert T. Bedford, Guy's Hospital; A. Snowden, R. R. Jones, and William A. Hewitson, Newcastle-on-Tyne; Joseph Tonks and C. J. Lewis, Birmingham; William Shaw, Edinburgh and St. Bartholomew's Hospital; Robert Cox and Edgar A. Hunt, St. George's Hospital; K. Townsend, St. Bartholomew's Hospital; Charles Wells and Edward P. Griffith, Middlesex Hospital; L. H. Haekman, St. Mary's Hospital; Alfred Mantle, London Hospital.

UNIVERSITY OF DURHAM.—The following is a list of candidates who passed the recent 1st M.B. examination:—

Callender, J. H.	Fenwick, Bedford.
Coombs, M. L. B.	Morton, Shadforth.
Dodd, J. R.	Young, Thos. M.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on April 26th:—

Jackson, Thomas, Great Torrington, Devon.
Knaggs, Robt. Henry Edw., Trinidad, West Indies.
Scott, David Francis, Mount-place.
Thresh, John Thomas, Southgate, Wakefield.
Tribe, Herman Thomas Bedingfield, Chatham.

The following gentlemen also passed the Primary Professional Examination:—

Herbert Blott, St. Bartholomew's Hospital; Edward Prichard Evans, Middlesex Hospital; James Homes and Robert Heald, University College; Graeme Bisdee Fraser, St. Mary's Hospital; Charles Ernest Cocksedge, London Hospital.

At the Preliminary Examination in Arts held at the Hall on April 27th and 28th, 75 candidates presented themselves, of whom 27 were rejected, and the following 48 passed and received certificates of proficiency in General Education:—

FIRST CLASS (in order of merit).—W. H. Hart and Jane Jaffé. 3rd: P. M. Earle and T. W. Price. 5th: C. O. Fowler, R. J. Harcourt, and Constance V. Hitchcock. 8th: F. St. John Kemm, R. M. Norton, and G. F. Travers.

SECOND CLASS (in alphabetical order).—F. W. Bate, R. B. D. Batt, H. H. Button, W. Case, T. H. Chittenden, W. T. Crick, E. Daunt, H. M. Davidson, D. T. Davies, G. H. Dawson, E. R. Derrett, T. Dixon, M. E. Dovaston, T. L. Downes, W. G. Ellis, A. Gretcham, A. Kingston, G. P. L. Llewelyn, G. T. Miles, H. C. Otway, A. A. Parrott, J. Payne, R. F. T. Perkins, G. Perrin, A. Pocock, T. W. Price, G. C. Roberts, N. Roberts, R. M. Roberts, F. E. Row, A. M. Rugeroni, M. M. Siddall, H. G. Sworn, A. W. Thomas, F. H. Thornton, A. J. R. Tyler, R. W. Watson.

WE understand that the salary of Mr. Wills, medical officer of the Torquay district of the Newton Abbott Union, has been increased from £70 to £85 per annum; and that of Mr. Manley, medical officer for Ipplepen, from £29 10s. to £32.

ARMY MEDICAL SERVICE.—The Fellows of the College of Physicians, Ireland, have memorialised Mr. Gathorne Hardy, drawing his attention to various defects in the present working of the Army Medical Department, and urging that the grievances of the medical officers may be remedied.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Fellows on the 1st inst., the following were elected Examiners by the Council:—For Letters Testimonial and Fellowship: Benjamin W. Richardson, Edward Stoker, John Barker, Edward S O'Grady, W. H. O'Leary, H. Gray Croly, William Thompson, Robert L. Swan. Examiners in Midwifery: Henry Croly, John R. Kirkpatrick, William Roe. Examiners in General Education: Frank Davys, Michael J. Malone, Robert Morton.

BEQUESTS &C. TO MEDICAL CHARITIES.—Mr. Hugh Davies Griffith, of Caerhun, bequeathed £1000 to the Seamen's Hospital Society, and £500 each to the Bangor Infirmary, the Flintshire Infirmary, the Denbighshire Infirmary, the Rhyl Men's Convalescent Home, the Rhyl Women's Convalescent Home, the Rhyl Children's Convalescent Home, the Ablett Fund in connexion with the Denbigh Lunatic Asylum, the British Home for Incurables, the Earlswood Asylum for Idiots, the Brompton Hospital for Consumption, Mrs. Gladstone's Convalescent Home, and Mrs. Tait's Convalescent Home. Queen Charlotte's Lying-in Hospital has received £2000 under the will of Mr. Charles McGarel.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The annual general meeting of this Society was held, by permission of the Royal Medical and Chirurgical Society, in their rooms, Berners-street, on the 27th April. The chair was taken by Mr Fuller, treasurer. From the statement read by the secretary, the receipts available for payments during 1876 had been £1354 18s. 11d. The expenditure had been £1300 5s. 11d., leaving a balance of only £54 13s. A sum of £2885 10s had been given to 58 widows and 13 orphans. The expenses had been £214 15s.11d. During the year 11 members had died, 4 had resigned, and 13 new members had been elected. The number of members at the end of the year was 402. Five widows had been admitted as fresh recipients of grants, 3 had died or become ineligible. One orphan had been declared eligible, and 2 had become ineligible for further grants. A legacy of £1000 duty free from the Rev. H. C. Morgan had been received. Mr. Prescott G. Hewett was elected a vice-president in place of Sir Wm. Fergusson, deceased; Mr. N. H. Clifton a director, in place of the late Dr. Carr; and Mr. Goodchild, Dr. C. Brodie Sewell, Dr. Blandford, Sir Wm. Jenner, Mr. W. Morrant Baker, and Mr. Rouse were elected directors in place of the six senior, who retired by rotation.

Medical Appointments.

BOWER, E. D., M.R.C.S.E., L.S.A.L., has been appointed House-Surgeon to the General Infirmary, Gloucester, vice Sampson, resigned.

BRISCOE, T. W., M.B., C.M., has been appointed Medical Officer to the Chippenham Union Workhouse, vice Jay, resigned.

CHEYNE, Dr. W. W., has been appointed Demonstrator of Anatomy at the University of Edinburgh, vice Scott, appointed Professor of Anatomy and Physiology at the University of Otago, New Zealand.

EATON, J., L.K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, &c., for the Ananoe Dispensary District of the Bathdrum Union, co. Wicklow, vice Lynch, resigned.

ELLIOTT, C., M.D., has been appointed Physician to the Redland General Dispensary for Women and Children, Bristol.

EVANS, F. M., M.R.C.S., L.R.C.P., has been appointed Attending Medical Officer to the Provident Medical Institution, Pimlico.

FOX, J., M.D., M.R.C.S.E., has been reappointed a Medical Officer for the Parish of Greenock, for one year.

GABB, J. R., L.S.A.L., has been appointed Assistant Resident Medical Officer to the Stamford-hill and Stoke Newington Dispensary.

HALTON, M. C., L.K.Q.C.P.I., has been appointed Honorary Acting Assistant-Surgeon to the 37th West York Rifle Volunteers, vice Blackburn, resigned.

HANNAN, F. J., M.D., has been appointed Medical Officer of Health for the No. 2 Rural District of the Alderbury Union.

HARRIS, S. H., L.K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Consulting Physician at Madras to the Madras Railway Company, vice Elder, resigned.

HASLEWOOD, A. O., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Longnor District of the Leek Union, vice Orr, resigned.

HAYMAN, P. C., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for No. 3 District of the Westbury and Whorwellsdown Union, Wilts, vice Seale, resigned.

HUNTER, J. B., M.D., has been appointed Parochial Medical Officer for No. 3 District of the Burgh of Paisley, vice Falconer, deceased.

MACCARTIE, F. F., M.B., has been appointed House-Surgeon to the County Infirmary and City Fever Hospital, Londonderry, vice Browne, appointed Medical Officer to the Church Hill Dispensary District of the Letterkenny Union.

MACDOUGALL, J., M.D., has been reappointed a Medical Officer for the Parish of Greenock, for two years.

MAHON, N., L.A.H.D., has been appointed Apothecary to the Workhouse, Ballinrobe Union, co. Mayo, vice Parker, resigned.

MARTIN, T. H., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for No. 4 District of the East Grinstead Union, vice Smith, resigned.

MORROW, J., M.D., L.R.C.S.Ed. & L.M., has been appointed Medical Officer, Public Vaccinator, &c., for the Ballarena Dispensary District of the Limavady Union, co. Londonderry, vice Fleming, resigned.

PLAXTON, J. W., M.R.C.S.E., L.S.A.L., has been appointed Assistant Medical Officer to the West Riding Lunatic Asylum, Wakefield, vice Lawson, appointed Assistant Medical Officer to the Middlesex Lunatic Asylum, Banstead.

PLUMER, S. T., M.R.C.S.E., has been appointed Assistant House-Surgeon and Dispenser to the Kent and Canterbury Hospital, vice Owen, resigned.

PRIDEAUX, T. E. P., L.S.A.L., has been appointed House-Surgeon and Secretary to the Scarborough Dispensary and Accident Hospital, vice Oswald, resigned.

SHORTRIDGE, S., L.R.C.S.Ed., has been reappointed a Medical Officer for the Parish of Greenock, for three years.

WIGIN, G. W., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the No. 7 District of the Pontefract Union, vice Taylor, whose appointment has expired.

WILSON, D., M.B., C.M., has been appointed Medical Officer for the Parish of Kilmaurs, vice Maclachlan, resigned.

Births, Marriages, and Deaths.

BIRTHS.

COGAN.—On the 25th ult., at Northampton, the wife of Lee F. Cogan, L.R.C.P.Ed., of a daughter.

CROSS.—On the 30th ult., at Stanhope-terrace, Regent's-park, the wife of John Cross, M.D., of a son.

CUNNINGHAM.—On the 27th ult., at Campbeltown, Argyleshire, the wife of Dr. John Cunningham, of a daughter.

HANNAN.—On the 17th ult., at Avonside, Downton, Wilts, the wife of Francis J. Hannan, M.D., of a daughter.

LOUSLEY.—On the 25th ult., at Reading, the wife of Oded Lousley, M.R.C.S.E., of a son.

MOORE.—On the 26th ult., at Burnham, the wife of Frederick F. Moore, L.R.C.P.Ed., of a son.

RAWSON.—On the 25th ult., at Baltinglass, the wife of Lewis M. Rawson, L.K.Q.C.P.I., of a daughter.

ROBERTSON.—On the 28th ult., at Parliamentary-road, Glasgow, the wife of Dr. Alexander Robertson, of a son.

ROE.—On the 26th ult., at Fairleroft, the wife of Edwin H. Roe, M.R.C.S.E., of a son.

SUTCLIFFE.—On the 1st inst., at Denmark-hill, the wife of John Sutcliffe, M.R.C.S. &c., of a daughter.

MARRIAGES.

EAGER—ANDREWS.—On the 3rd inst., at St. John's, Lewisham High-road, by the Rev. Jas. Fountaine, M.A., brother-in-law of the bridegroom, Wilson Eager, L.R.C.P., Medical Superintendent of the Suffolk County Asylum, to Mary Jane (May), second daughter of the late Edward Andrews, of Guildford.

HENDERSON—WELLS.—On the 26th ult., at St. Matthew's, Oakley-square, William Henderson, M.B., to Emma, daughter of H. T. Wells, Esq.

HETHERINGTON—FAWCETT.—On the 24th ult., at Drumkeeran, Charles E. Hetherington, M.B., to Adelaide, daughter of the late James Fawcett, Esq.

DEATHS.

GIBSON.—On the 30th ult., at Norwich, Robert Edward Gibson, M.R.C.S.E., aged 36.

GORDON.—On the 25th ult., at Malta, William Robert Gordon, M.B., Surgeon Indian Service, aged 33.

HENDERSON.—On the 30th ult., at Schoolhill, Aberdeen, William Henderson, M.D., aged 94.

LLOYD.—On the 22nd ult., Henry James Lloyd, L.R.C.P.Ed., of Margaret-street, Cavendish-square, aged 44.

ONLEY.—On the 16th ult., at Cheltenham, Samuel Onley, M.R.C.S.E., aged 38.

PARKER.—On the 22nd ult., at Caledonian-road, Joshua Parker, M.B., aged 82.

PENNELL.—On the 20th ult., at Powis-square, Notting-hill, John Wilson Croker Pennell, M.D., aged 57.

POULDEN.—On the 16th Feb., accidentally drowned when a passenger on board the steamer *Platypus*, at Woodford Island, Clarence River, New South Wales, Frederick George Poulden, M.R.C.S.E.

RUDGE.—On the 17th ult., at Dymock, John Edmund Rudge, M.R.C.S.E., aged 40.

TYSON.—On the 27th ult., at Folkestone, William Taylor Tyson, M.R.C.S.E., aged 65.

WELCHMAN.—On the 14th ult., at Lichfield, Charles Edward Elliot Welchman, M.R.C.S.E., aged 54.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Medical Reports of the West Riding Lunatic Asylum.
R. Herring: Personal Experiences of English Departmental Government.
Leisure Hour. May.
Good Words. May.
Cassell's History of India. Part XVII.
Drs. Andrews and Lacey: The Mortality of Surgical Operations.
E. B. De Fonblanque on a New System of Elementary Teaching.
Veterinary Journal. May.
The Popular Science Monthly. May.
Dr. T. Billroth: Lectures on Surgical Pathology and Therapeutics.
Hardwicke's Science Gossip. May.
Month y Homœopathic Review. May.
The Veterinarian. May.
Dr. C. E. Wing: The Use of Uterine Supporters.
G. Gore: The Art of Electro-Metallurgy.
Handbook of the Union and Central Pacific Railway Companies.
Sanitary Journal for Scotland.
Medicinal Plants. Part XX.
Monthly Microscopical Journal. May.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Stewart's Instruments.)

THE LANCET OFFICE, MAY 3RD, 1877.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp Shade	Min. Temp	Rain-fall	Remarks at 8 A.M.
Apr. 27	29·91	E.	43	47	75	51	40	...	Overcast
„ 28	29·73	E.	42	47	59	50	42	...	Overcast
„ 29	29·87	E.	43	46	60	52	40	...	Overcast
„ 30	30·09	N.E.	42	45	62	53	42	0·05	Overcast
May 1	30·37	N.E.	39	43	65	46	38	...	Overcast
„ 2	30·34	N N E	38	44	66	50	40	...	Overcast
„ 3	30·13	N.W.	40	45	75	50	35	...	Fine

Notes, Short Comments, and Answers to Correspondents.

"SPONTANEOUS" CURE OF HIP DISEASE.

THERE was exhibited at a late meeting of the New York Pathological Society the head of a left femur, illustrating a spontaneous cure of hip disease, notes of which appear in the *Medical Record* of New York. It was removed from a boy eleven years of age, who had died of gastro-intestinal disorder. The deformity of the hip presented the appearance of a dislocation of the head of the femur on the dorsum ilii. On examining the joint at the post-mortem, the muscles in its immediate neighbourhood were found well developed, the sinuses which had existed during the progress of the disease had entirely healed, and the bone itself presented no signs of actual disease. The head of the bone, however, was firmly fastened in the acetabulum; a portion of the caput femoris was entirely gone, the remainder being considerably eroded along its whole extent. The point of interest was the alteration of the relation of the head of the bone to the shaft, so that it assumed the position of a right angle. There was no dislocation present; but the alteration in the angle of the neck of the bone gave a general direction to the limb resembling that deformity. The disease of the hip dated from 1871, and was traced to a fall.

Dr. Lawson's paper shall be inserted in an early number.

MILITIA SURGEONS.

To the Editor of THE LANCET.

SIR,—The deputation that kindly advocated the cause of militia surgeons before Mr. Hardy on the 23rd inst. most clearly established the fact that we have a substantial grievance which calls for adjustment and redress.

It is mere puerility to essay a refutation which the Secretary of State for War attempted, but utterly failed to accomplish. Increase of rank to militia surgeons is worthless, since they attach no value to a title which length of service alone gives, but not merit; and as to increase of pay, there is nothing of the kind, for the fees paid for the examination of line recruits during trainings are at the same time taken away from us. How £27 a year and allowances tacked to a useless title can compensate for the loss of £250 or £300 a year, and added to this the total sacrifice of private practice for regimental duty, I may well leave others to judge. Was it not insulting to militia surgeons that Mr. Hardy, in replying to our friends of the deputation, should have remarked that an *ad misericordiam* appeal to the Treasury he thought would be of no avail? We are not beggars, but rest our cause to compensation for having been unjustly dealt by on simple justice, and this I hope we shall secure through the House of Commons. Should at length our appeal be in vain, it at least will act as a warning to our brethren to beware should a number of vacancies open to their view, for the profession *à la militaire* is now at an alarming discount.

Yours obediently,

April, 1877. FIAT JUSTITIA.

FLOWERS FOR HOSPITALS.

A LADY writes, offering to assist in securing a supply of fresh flowers for hospitals if aid is needed. Institutions in London desiring assistance might communicate with us.

JABORANDI IN BRIGHT'S DISEASE.

DR. E. T. BRUEN, Physician to the Philadelphia Hospital, reports in the *Philadelphia Medical Times* the results of his experience in the use of jaborandi in morbus Brightii. He narrates three cases. In the first case, a woman, aged thirty, who laboured under great dyspnœa from œdema of the lungs, with pleural adhesions, an infusion of two drachms of the drug in two ounces of water, taken in the course of two hours, induced profuse perspiration and general relief, which was also experienced on subsequent occasions, although the anasarca was never completely subdued. Digitalis was used as an auxiliary. The subject of the second case was a dwarf, with œdema localised in the cervical region, and only slight general anasarca. Jaborandi was employed in the same doses as in the former case; profuse sweating occurred, and at the end of a week no trace of the swelling existed. The third case was marked by very severe dyspnœa and general anasarca, and the patient at the time of coming under treatment was nearly comatose. The use of jaborandi was attended here also with great relief to the symptoms. Dr. Bruen knows of no drug the action of which is so beneficial in cases of Bright's disease.

W. G.—The list was published as it came to us from the College.

TREATMENT OF ELEPHANTIASIS.

To the Editor of THE LANCET.

SIR,—I venture to hope you may deem the following of sufficient interest to insert in your widely circulated journal. It may possibly be of some use to surgeons placed like myself in extreme regions of the world, and who are desirous of relieving their fellow-men from intolerable burdens. In this connexion I may mention that I am employed as a hospital surgeon and teacher of Medicine in the south of Japan.

The disease called elephantiasis Arabum, or Barbadoes leg, is common enough in parts of Japan. Well-known growths of this description may attain a prodigious size. The circumference of one such scrotal tumour which I measured was five feet two inches. The unhappy proprietor was literally sitting a prisoner in the midst of his own scrotum. In not a few cases the patient would willingly get rid of his troublesome burden, even at the risk of his life.

In the early stages of the disease I have seen good results from local pressure combined with the internal use of iodide of potassium, quinine, and iron. In the more advanced cases such treatment is of little or no avail.

In regard to elephantiasis of the leg, I have not yet seen any cases in which I felt justified in recommending removal of the limb.

I have no experience as to the benefit likely to accrue from tying the main artery of a limb which is the seat of elephantiasis. I confess the practice to my mind stands self-condemned upon the principle that the risk is too great, and the prospect of benefit too small, for such an operation to be recommended by a responsible adviser.

In regard to tumours of the scrotum in the male and those of the labia in the female, removal by amputation is comparatively safe and easy.

My object in writing is to draw the attention of young surgeons who may have occasion to operate in such cases to a plan of procedure which I venture to recommend after a somewhat extended experience. When practicable, bandage the tumour tightly with an elastic bandage, so as to render the parts as bloodless as possible. Before removing the bandage, apply an elastic band tourniquet to the root of the tumour, so as to stop circulation. Preserve any tolerably good skin at the neck of the tumour by dissecting it back to the line of amputation. In case of scrotal tumours, cut down upon the penis and testicles, and free them from the surrounding mass. If there be hydrocele, open it, and remove part of the tunica vaginalis. Cut away the tumour, leaving the penis and testicles. Remove the elastic band tourniquet, and arrest hæmorrhage. The testicles may often be covered with skin dissected back from the neck of the growth. If, however, one or both testicles be much enlarged, it or they should be removed. In regard to tumours of the labia, any healthy skin or mucous membrane within the enlarged vulva should be preserved, as well as that of the neck of the tumour on its outer aspect. After removal the edges of the wound are to be brought together by sutures, and the wound dressed according to the system in which the surgeon happens to have most faith.

The restoration of sexual competence will not be deemed by the patient a detraction from the merits of the operation.

I remain, Sir, yours truly,

Kagoshima Hospital, Satsuma, Japan, Jan. 1877. WM. WILLIS.

Mr. Henry Kimpton.—We have already explained that a paragraph which has gone the round of the newspapers, to the effect that Mr. Kimpton, the well-known bookseller, died recently from an accident, was inaccurate. Mr. Kimpton is still alive, and the business is continued. Our correspondent should write to the daily journals with whom the report originated, and request a contradiction.

Sinbad the Sailor.—Our correspondent might apply to the Embassies of the respective countries.

A General Practitioner.—Cow's milk is always the best.

CASE OF ACUTE ORCHITIS TREATED BY PUNCTURE.

To the Editor of THE LANCET.

SIR,—Having lately had a case of acute orchitis under my care, I determined to try Mr. Henry Smith's mode of treatment by puncture, and thinking it might induce others to adopt the same mode of treatment, I wish to bear testimony to its quick and satisfactory result.

J. B—— was admitted into the hospital on the 17th February, suffering from acute orchitis of the left testicle. On the morning of the 18th I made a puncture into the body, which at once relieved him from pain, a little blood and serum exuding from the opening. Ordered a cold lotion to be applied to the part, and an aperient mixture. The testicle gradually diminished in size, so that he was enabled to leave on the 22nd, with instructions to wear a suspensory bandage. This, however, he neglected to do, but with no bad effect, although he resumed his work, which was that of a labourer, the day after leaving.—Yours obediently,

Newark Hospital, May, 1877. D. S. E. BAIN, M.R.C.S. Eng.

LYONS SCHOOL OF MEDICINE.

THE new School of Medicine in Lyons has been formally opened, and the professors in the various departments have commenced their teaching work. The Municipal Council of the town have just granted an additional handsome sum of money towards the completion of the medical and surgical wards.

ON CURRENT MEASUREMENTS IN ELECTRO-THERAPEUTICS.

To the Editor of THE LANCET.

SIR,—I fail to see what advantage Mr. Jacob's method has over the use of a properly constructed galvanometer. What he proposes to do is simply to measure the resistance of the patient's body; and unless he at the same time knows the electro-motive force and internal resistance of his battery, both of which vary considerably with use, he is as far as ever from having determined his current strength. For this, I hardly need repeat, is the quotient of the E.M.F. by the sum of the resistances, internal and external. The galvanometer I described gives the current strength *directly* in B.A. units. It is a very great pity that electrical measurements are not always expressed in such units, which would give them an absolute value. Readings from a tangent galvanometer, unless we know its reduction factor, have only a relative value; whilst measurements on a multiplicator, such as Mr. Jacob has used, do not even give us that, since such instruments do not necessarily obey the law of tangents.

The form of rheostat your correspondent suggests has long been used by physicists and electro-therapeutists. A convenient instrument is made of a piece of glass tubing, ·5 square centimetre in area, and 30 centimetres long, filled with a concentrated solution of sulphate of copper. At its lower extremity the tube is closed by means of a copper disc, to which one of the rheophores is attached, whilst the other is connected with a copper collar at the upper extremity. A copper rod 30 centimetres long, with a convenient head, is fitted to the collar accurately enough to secure contact, but at the same time loosely enough to allow its being easily worked up and down the tube. When fully pushed in, it will touch the disc at the opposite end, and no resistance is interposed. To every millimetre it is drawn out corresponds a resistance of about 6 ohms, the specific resistance of the liquid being nearly 300,000. The instrument can therefore be used for resistances up to 1800 ohms. A scale, experimentally corrected, is fixed to the tube, and serves to read the resistances directly. The human body offers resistances that may amount to 3000 ohms or more; two tubes, therefore, side by side and properly connected, must be used for medical purposes. The dilute sulphuric acid proposed by Mr. Jacob, having a very low specific resistance, cannot be used, as it would require tubes yards in length to obtain the necessary resistance; besides which the metal rod would speedily be corroded. A rough but useful rheostat can readily be made on the same system with a piece of glass-tube of the required diameter, two corks, and some stout copper-wire. If approximate measurements only are required, the solution of sulphate of copper may be used more dilute, which increases greatly its specific resistance, and thus a shorter tube will be sufficient. Its graduation is to be made by simultaneous readings on a set of resistance coils; but it must be borne in mind that the chemical action, which will take place the more rapidly the more dilute the solution, speedily alters the specific resistance of the liquid. The error which renders Dr. Tibbits' arguments fallacious consists in his overlooking the fact that, in applying the sponges to the terminals of his galvanometer, he merely obtains the ratio between the E.M.F. of his battery and the resistances in the circuit (that of the battery and that of the galvanometer). To make this evident, we take 10 Smee's, with an E.M.F. of ·6 volt, and an internal resistance of ·4 ohm each; and 10 Leclanché's, with an E.M.F. of 1·5 volt, and an internal resistance of 15 ohms each. Taking the resistance of the galvanometer at 5 ohms, we obtain, according to Dr. Tibbits:

$$10 \text{ Smee's} : \frac{\cdot 6 \times 10}{\cdot 4 \times 10 + 5} = \frac{6}{9} = \cdot 66 \left\{ \begin{array}{l} \text{B.A. units of current} \\ \text{strength.} \end{array} \right.$$

$$10 \text{ Leclanché's} : \frac{1 \cdot 5 \times 10}{15 \times 10 + 5} = \frac{15}{155} = \cdot 1 \left\{ \begin{array}{l} \text{"} \\ \text{Nearly.} \end{array} \right.$$

We now insert into the circuit a portion of the human body, an arm, for instance, the resistance of which may be taken at 3000 ohms. Our current strength becomes with

$$10 \text{ Smee's} : \frac{6}{9 + 3000} = \cdot 002 \left\{ \begin{array}{l} \text{B.A. unit of current} \\ \text{strength.} \end{array} \right.$$

$$10 \text{ Leclanché's} : \frac{15}{155 + 3000} = \cdot 0047 \left\{ \begin{array}{l} \text{"} \\ \text{Nearly.} \end{array} \right.$$

That is, the current strengths will be in the first case 66 stronger, in the second 2·4 weaker, with the Smee's than with the Leclanché's. In order to have currents physiologically similar, we ought to use 24 Smee's:

$$24 \text{ Smee's} : \frac{\cdot 6 \times 24}{14 \cdot 6 + 3000} = \frac{14 \cdot 4}{3014 \cdot 6} = \cdot 0047 \left\{ \begin{array}{l} \text{B.A. unit of current} \\ \text{strength (nearly).} \end{array} \right.$$

These actual magnitudes will, I hope, help to realise more vividly than vague "deflections" of the needle, the real nature of the facts involved in the question before us. A galvanometer, in order to be of any use, must be included in the circuit along with the patient's body. It will then, if properly constructed and graduated, give at once (for stabile applications) the current strength, that is the number of farads per second, that is the *dose*, of electricity administered to the patient; or when muscular contractions are sought (labile or interrupted applications), it enables us to record *objectively* the current strength requisite to obtain them. Thus much for the scientific aspect of the question. Dr. Tibbits now tells that in 95 of the cases, measurements, if elsewhere possible, are impracticable, and calls to witness four well-known physicians. Is he sure they would support him in his sweeping assertion? I have good reason to suspect they are not all so opposed to the views I have propounded as he would have us believe. I still cling to the hope that electro-therapeutics, hardly a quarter of a century old, has not yet attained its highest development, and that the theoretical cloudiness and practical empiricism which tend to impede its progress will soon be dispelled by clearer light and more rational methods. One of the first conditions of progress is, surely, accurate observations and accurate methods of recording them.

I am, Sir, yours obediently,

A. DE WATTEVILLE,
Electro-Therapeutical Assistant to University
April 30th, 1877. College Hospital.

INFECTION AT INQUESTS.

THE question has very properly been raised whether it is desirable to provide apartments for the holding of inquests in public mortuaries. There would doubtless be danger of infection if jurymen were compelled to visit a deadhouse in which the body of some person dying of communicable disease was exposed. This should receive attention. It is inexpedient to collect jurors and witnesses in a room adjacent to a deadhouse, and we question whether, looking to the fact that jurors must see the body in every case of inquest, it would not be well to erect in each district a small morgue, to which such cases might be removed, apart from the deadhouse, which is to be made the public receptacle for bodies removed from crowded tenements. The peril has been apparently overlooked.

TWIN LABOUR: HEAD PRESENTATIONS.

To the Editor of THE LANCET.

SIR,—The following case may prove of interest to many of your readers.

On Thursday, March 1st, I was called to see the wife of an African negro, who was reported to be in labour. It was also stated that she had been in this condition for twenty-four hours previously, and that the "waters" had escaped. I found the os uteri within easy reach of the finger, dilated to about the size of half-a-crown piece, thin and rigid. The vertex was the presenting part, and could be felt without much difficulty through the membranes, which had been only partially emptied of liquor amnii. I administered a full dose of opium, and requested to be sent for should any untoward symptom present itself. She was doing well, and as the case was evidently a lingering one, and without a bad symptom, I preferred to leave her to nature. After this she had no return of pains until the following Saturday, when she was delivered of a living child *per vias naturales*, just forty-eight hours after my first visit. The nurse was unable to extract the placenta, and requested the husband to come for me. This he refused to do until the next day, when he came and told me that his wife had been confined, "but that the after-birth would not come away." I at once visited her, and found that there was another fœtus within the womb, and that the *head was again* the presenting part. This second fœtus had a separate bag of membranes, which I at once ruptured, and gave a full dose of ergot. As the uterine contractions were feeble, I applied Barnes's long forceps, and delivered her of another living child without difficulty. There was a common placenta, both umbilical cords being attached to it. Both mother and twins have since done well.

My object in calling attention to this case is, in the first place, to ascertain whether a similar case of *two* heads presenting in a twin labour has been before observed. In my own experience, extending over fifteen years, and including a large number of labours, this case is unique. I do not remember whether, when I was a student at St. Thomas's, Dr. Barnes ever mentioned a case of double presentation of this kind in his Lectures on Midwifery, and I shall be glad to know whether others have seen such a case. I should mention that the pelvis of the mother in this instance was a very capacious one. Secondly, this case illustrates the safety of giving nature fair play in natural presentations, even in cases of lingering labour. I am not an advocate for the practice of delaying too long the use of the forceps; but I think the teaching of the present day rather encourages the premature use of these valuable aids to labour.

I am, Sir, yours obediently,
JAMES TOMPSETT, M.R.C.S., &c.,
Jamaica, March 13th, 1877. Government Medical Officer.

HOOPER'S CENTRAL TUBE WATER OR AIR BED.

THIS bed has been specially constructed by Messrs. Hooper and Co., of Pall-mall, for cases of paralysis, disease of the spine, accidents, and where the natural functions of the body are performed involuntarily. It will be found extremely serviceable and useful. It is portable, elastic, non-absorbent, and can be used on any bedstead. The bed appears to us specially adapted for asylums and workhouse infirmaries.

Mr. Massiah (Edinburgh Royal Infirmary) is thanked. The cases shall appear shortly in the "Mirror."

DISPENSARIES FOR SAILORS.

To the Editor of THE LANCET.

SIR,—In your issue of March 17th, 1877, there is a short notice of a dispensary started, or to be started, at Liverpool for the treatment of sailors exclusively. I am anxious to get some idea as to the manner of starting one, and I beg leave to ask if any of your readers will be kind enough, in case they know any of the names of the officers of the dispensary, or of the Liverpool Sailors' Home, to send a circular, if there be any, in regard to the management of the work. We have considerable shipping here at some seasons of the year, and it seems to me that some of our merchants here might interest themselves in such a work did they know of its working in Liverpool.

I am, Sir, yours truly,
JAMES A. SPALDING, M.D.
400½, Congress-street, Portland, Maine, U.S.A., April 4th, 1877.

Mr. J. S. Wesley.—The point is not quite clear; but it would seem that the medical officer of a workhouse has claim to a fee for a certificate of lunacy in a case discharged from a union house to an asylum.

Enquirer.—The rule varies in different places. Act in accordance with the local rule.

Late Staff Surgeon.—1. We are quite unable to answer our correspondent's question relative to the scope of the neutrality laws. — 2. Direct application should be made to the Society, or to Mr. McCormac, St. Thomas's Hospital.

ELECTROLYSIS IN OVARIAN TUMOURS.

To the Editor of THE LANCET.

SIR,—Can any of your readers inform me of the address of the surgeon in Germany who has lately been trying electrolysis in ovarian tumour? Also, the addresses of any English surgeons who may have practised it, and if success followed their efforts?

Yours very truly,
Motherwell, April 25th, 1877. A. T. MOFFAT.

"FEBRE PERNICIOSA."

IN a recently issued Consular Report, giving some interesting information concerning the Portuguese colony of Mozambique, it is stated that a very fatal febrile disorder recurs at rare intervals in the province, to which the name of "febre pernicious" is given. A virulent outbreak of the disease occurred last year, causing a general panic of the population. Among the first victims were two Englishmen, Mr. Dixon, our Vice-Consul, and Commander Gray, R.N.

Dr. Williams.—We do not think a controversy on the subject of Vegetarianism would be useful.

TREATMENT OF WOUNDS BY COMPOUND TINCTURE OF BENZOIN.

To the Editor of THE LANCET.

SIR,—I should be pleased if you would publish the following case of compound fracture treated in the manner so recently recommended by Mr. Bryant. After the cases already cited by that gentleman, there is nothing remarkable in it, and I should not send it to you were it not to show how easy and effective a treatment Mr. Bryant has pointed out for those practising surgery in quarters of the globe far removed from surgical apparatus shops, and often where too great a variety of dressings is not to be met with.

A. B——, a coolie labourer on a sugar estate here, was struck in a brawl with a stout stick by a fellow-workman on the forearm. When I saw him there was an open wound; but the swelling was so great that I only detected a fracture of the ulna after a very careful examination of the parts. An evaporating lotion of equal parts of pure rum from the adjacent distillery and water was ordered, with six grains of calomel and a senna draught, and I resolved not to meddle further until the ensuing day, when I found the œdema so decidedly diminished that I easily made out a clean fracture of the middle third of the ulna. Weak carbolic lotion was then applied to the wound in the soft parts, and the arm put up in lateral splints, made from the spathe of a species of palm. High fever supervened on those proceedings, and by the fourth day the arm presented the following appearances, coupled with severe general disturbance:—Sloughing of epidermis throughout almost all the lateral aspect of forearm and a portion of its flexor aspect; a wound discharging pus, which could not be termed healthy, and on introducing my probe into this, I could pass it down to the bone, and in another direction for four inches amongst the muscles situated on the flexor and lateral surfaces of the limb. I then applied lint soaked in the compound tincture of benzoin, reapplied the splints, bandaging very evenly and carefully, after thoroughly cleansing all with carbolic lotion, and did not disturb the dressing for fully two days. This time the external parts were looking much more healthy, and the wound was discharging a very small quantity of sweet pus. I examined it twice in the course of the next seven days, applying clean lint again soaked in the benzoin each time, when it was converted into a simple fracture, firm union taking place, and the man has made an uninterrupted recovery.

This is a plan of treatment very easy to adopt anywhere, and certainly invaluable where simplicity is the first thing to be aimed at, as here.

I am, Sir, faithfully yours,
JAS. D. BRADBURN, L.F.P.S.,
Surgeon to Her Majesty's Government in Grenada.
Grenada, West Indies, April 5th, 1877.

INTERNATIONAL MEDICAL CONGRESS OF GENEVA.

THE fifth International Congress of Medical Science will be held in Geneva from the 9th of September to the 15th, under the presidency of Professor C. Vogt. Papers are beginning to be received in the different sections from some of the most eminent physicians and surgeons on the Continent. The section of Biology promises to be especially interesting and valuable in contributions.

Mr. E. H. Gawey.—Nicholson's Text-book of Zoology; Bennett and Thomé's Botany.

CASE OF SPINA BIFIDA TREATED BY THE INJECTION OF MORTON'S SOLUTION.

To the Editor of THE LANCET.

SIR,—The following case may be interesting to the readers of your journal.

On Sept. 2nd, 1876, I was called to attend Mrs. J—— in her second labour. After waiting about two hours a female child was born, with spina bifida in the lumbar region, talipes varus in both feet, and both knee-joints imperfect, one being a kind of "double-joint," so that the leg could be bent either directly inwards or upwards in the ordinary way. The parietal bones had not united, so that the anterior fontanelle communicated with the posterior. The child was well nourished, but for some time after its birth was troubled with diarrhœa. The tumour was very large, having a circumference at the base of eight and a half inches, and from base to apex a length of two inches.

March 16th.—I determined to inject Morton's iodo-glycerine solution. Accordingly I introduced a small trocar, injected a drachm of the solution, and plugged the opening with a piece of lint.

17th.—Tumour larger, very red; child feverish.

23th.—Tumour smaller; feels more solid at base. Repeated injection.

April 10th.—Tumour more solid; very much smaller, having decreased to quarter its former size. Repeated injection.

16th.—Tumour has shrunk to about the size of a small walnut, communication between it and the spinal cord completely closed, as there is no discharge on pressure; and there is solidification, except in one small spot at the apex.

20th.—Complete solidification. I have no doubt the tumour will shrink more; but the cure may be said to be perfect, as there is no communication whatever between it and the cord.

The child died from hydrocephalus on the 30th April, and, taking into consideration the complications of the case, it is a wonder the child lived so long as it did.

I may mention that craniotomy was performed on the mother's first labour.

Yours obediently,
Dawley, Salop, April 30th, 1877. F. HOWARD DAVIS.

PRICKLY HEAT.

To the Editor of THE LANCET.

SIR,—I should like to bring before the section of the profession practising in tropical climates the following powder as a cure for that troublesome skin disease, "prickly heat." I used to suffer myself dreadfully, and tried all the supposed remedies, without deriving any apparent good. Some, as carbolic acid, appeared to produce intolerable itching at night. Lately I have seen the local application of sulphate of copper recommended. The powder has the following percentage composition:—

Sulphur sub.	80
Magnesia ox.	15
Zinci ox.	5
	100

To be used morning and evening in the following way:—The dry powder being on a plate, a wet sponge is pressed down on it, and a certain quantity will adhere; this is firmly rubbed on the parts affected, fresh moisture and powder being from time to time supplied, the application being continued ten to fifteen minutes each sitting. The parts are then washed clean of the adhering particles. I have never seen the worst cases last beyond four or five days. So complete would the cure be that it would be impossible to say if the person ever had the disease. No smarting attends its use, and after the first application itching is practically at an end. Also in that form of prickly heat resembling urticaria it effects a perfect cure, and the powder used once or twice a week as described will keep the skin in a perfect condition. I expect the sulphur acts as stimulant, the magnesia as stimulant neutralising the free acid of the sweat, and the oxide of zinc as astringent. Be that, however, as it may, its effects on the skin are certainly remarkable, and I should like to hear of success attending its use.

I am, Sir, yours &c.,

HENRY LEVINGE, A.B., M.B.,
Surgeon, R.N.

H.M.S. *Tyne*, Jan. 25th, 1877.

ERRATA.—In our last number, p. 611, col. 2, line 17 from top, for "A case of direct wound of the ureter," read "A case of hydronephrosis following fracture of the ilium."—In the notice of Mr. West's translation of Prof. von Langenbeck's "Surgical Observations on Gunshot Wounds of the Hip-joint, p. 611, col. 2, line 12 from bottom, for Dr. "Leary," read *O'Leary*.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. J. Williams, London; Dr. H. Weber, London; Mr. Howse, London; Mr. Kesteven, Holloway; Mr. Alford, Haverstock-hill; Dr. Bayes, London; Dr. Church, Edinburgh; Mr. Eaton, London; Mr. Halb Bex, Switzerland; Dr. Edis, London; Mr. Bradburn, Grenada; Dr. Gairdner, Glasgow; Mr. Halton, Barnsley; Dr. Coutts, Birhowy; Mr Roocroft, Wigan; Mr. E. Andrews, Chicago; Mr. A. de Watteville, London; Dr. Taylor, Nottingham; Mr. Rayner, Uxbridge; Mr. Brown, West Bromwich; Mr. Hardcastle, London; Mr. Nunneley, Leeds; Dr. Matthews Duncan, Edinburgh; Mr. Hill, London; Mr. S. J. Hutcheson, London; Mr. P. Lee, Stockwell; Mr. Higgens, London; Mr. Collette, London; Mr. Veoman, London; Dr. Hopkins, Camberwell; Mr. Gillebrand, Hackney; Mr. H. Kimpton, London; Mr. Hannan, Downton; Dr. Speedy, Dublin; Dr. Crawcour, New Orleans; Mr. Coleman, London; Dr. Francis, Sutton; Mr. Lindsay, Kilmaars; Dr. Armstrong, Newcastle; Mr. Blackett, London; Dr. Cortis; Dr. Williams, Southampton; Mr. Le Neve Foster; Lady Lechmere; Mr. Bain, Newark-upon-Trent; Dr. Alexander; Mr. Peyton; Dr. Davies, Dawley; Dr. Lindsay, Mickleover; Dr. Fitzpatrick, Liverpool; Dr. Coales; Mr. Chapman, Bath; Mr. Field, March; Mr. Woolcott, Canterbury; Mr. Poulton, Gloucester; Mr. Dent, Whitchurch; Mr. Day, Richester; Mr. Callingham, Edinburgh; Mr. Elliott, Bow; Mr. Barton, Epsom; Mr. Wilkin, London; Dr. Cayley; Mr. Nunn; Dr. Renton, Glasgow; Mr. Bennett; Dr. Smith, Kilburn; Mr. Gibbs; Mr. Bradley, Manchester; Mr. Stevens; Dr. Peswick; Mr. Force; Mr. Kemp; Dr. Jay, Chippenham; Dr. Gabe, Stoke Newington; Mr. Hermann; Mr. Palmer; Dr. Hathill, Dublin; Mr. Unsworth; A Subscriber; M.D.; A Student; Fiat Justitia; Factory Surgeon; Economist; Enquirer; R. Y., Dublin; Physician; Registrar-General of Edinburgh; The President of the Pharmaceutical Society; Late Staff Surgeon; L.R.C.P.; Taurus; M.R.C.S.; A Parishioner; &c. &c.

LETTERS, *each with enclosures*, acknowledged from—Mr. Greenwood, Liverpool; Mr. Hughes, Ombersley; Mr. Whitin, Datterses; Mr. Wheeler, Manchester; Mr. Godfrey, Northampton; Mr. Pearce, Bristol; Mr. Herd, Bramshott; Dr. Riordon, Cork; Mr. Smith, Hastings; Mr. Wellington; Mr. Weir, Morpeth; Mr. Walford; Messrs. Harvey and Reynolds, Leeds; Mr. Dicey; Mr. Young; Mr. Harris; Dr. Thomas; Mr. Brookfield, Cheltenham; Mr. Gregory; Mr. Souter; Dr. Wilson, Alton; Mr. Rutherford; Mr. Hine, Ilminster; Mr. Ormond, Wantage; Mr. Lilley; Mr. Edwards, Wolverhampton; Dr. Fussell, Brighton; Mr. Pattinson, Topsham; Mr. Inskipp, Hastings; Messrs. Bernard and Co., Leith; Mr. Johnson, Newcastle; E. R. M., Northampton: L., Menai Bridge; A. B., Littleborough; A. B. C.; S., Yaxley; G. C., Sevenoaks; W. W.; H. C. H.; Dispenser; F. G., Oldham; A. B., Topsham; Alpha, Putney; E. P. D.; Hermes; K. B.; Beta; M. P.; X. Y. Z., Carmarthen; W. E., Cleveland; Fidelis, Mansfield; B., Camberwell; M. N., Margate; Medicus, Derby; Surgeon Bridgwater; M. C. B. W.; Medicus, Glasgow; Omega, Truro; Cutis.

Hampshire Post, East London Observer, Portsmouth Times, Glasgow Evening Times, Sheffield Independent, Pontypridd Advertiser, St. Pancras Gazette, Macclesfield Courier, Record, Dudley Herald, and *Richmond and Louisville Medical Journal* have been received.

Medical Diary for the ensuing Week.

Monday, May 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. General Monthly Meeting.
MEDICAL SOCIETY OF LONDON.—8½ P.M. Conversazione.—Annual Oration by Dr. Hughlings Jackson: "Ophthalmology and General Medicine."

Tuesday, May 8.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Gladstone, "On the Chemistry of the Heavenly Bodies."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Dr. Pearson Irvine, "On the Clinical Condition of the Heart and Vessels in Chlorosis."—Mr. Clement Lucas: "Extraction of a broken Silver Tracheotomy Tube from the Left Bronchus."—Mr. Knowsley Thornton: "Twenty-five Cases of Ovariotomy, with Remarks on the Fever following the Operation."

Wednesday, May 9.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
EPIDEMIOLOGICAL SOCIETY.—8½ P.M. Dr. Mouat, "On Medical Statistics of Epidemic Disease."

Thursday, May 10.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Heat."

Friday, May 11.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8½ P.M. Mr. Furneaux Jordan, "On a Case of Excision of the Os Calcis and the Astragalus, in which the second row of Tarsal Bones was drawn underneath the Malleoli."—Dr. Dowse, "On a Fatal Case of Syphilis contracted from the Congenital form of the Disease."—Dr. Pearson Irvine, "On a Case of Empyema and Abscess of the Liver in which Parcentesis was performed."—Mr. MacCormac, "On a Case of Talicotian Rhinoplasty" (a living subject).
ROYAL INSTITUTION.—9 P.M. Mr. D. Mackenzie Wallace, "On Intellectual Movements and Secret Societies in Russia."

Saturday, May 12.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. W. H. Pollock, "On Modern French Poetry."

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